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VOLUNTARY ASSOCIATIONS AND PSYCHOLOGICAL
WELL-BEING IN OLDER PEOPLE

by

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Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor
of Philosophy in the Department of
Psychology in the Graduate School
of Duke University

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ABSTRACT

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ABSTRACT

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This study examines the relationship between voluntary associations and the psychological well-being of older people through path analysis. The goals of the study were: (1) to ascertain whether differential research findings are due to measurement artifact, (2) to evaluate the assertions of traditional activity theory versus those of a modified activity theory taking quality into account, and (3) to isolate factors which contribute to and/or mediate the relationship of voluntary-association participation and psychological well-being. Analysis was conducted at two levels. First, a model was developed to study individual participation in voluntary associations, satisfaction with participation, and well-being. Second, a model was developed to examine types of voluntary associations and their effects on satisfaction with participation and on well-being.

Subjects were 50 members of voluntary associations who were recruited from target groups in the Durham, North Carolina area. There

were 26 males and 24 females. They ranged in age from 61 to 90.

The results of the individual path analysis indicate that differential findings due to measurement artifact is likely. After controlling for the effects of health, education, income, and social desirability bias in the model, voluntary-association activity as measured by the Chapin scale was significantly correlated with psychological well-being as measured by the Bradburn scale; however, measurement of voluntary-association activity by an average number of meetings measure was not correlated significantly with any measure of well-being. In addition, the Chapin measure did not correlate significantly with the LSI-Z or with the Cantril Ladder.

The examination of traditional activity theory versus modified activity theory was somewhat inconclusive, although the results did suggest that mere participation may have effects on psychological well-being that are equal to or greater than the effects of satisfaction with participation.

The results of the voluntary association path analysis indicate that their characteristics have consequences both for satisfaction with voluntary associations and for psychological well-being. People who belonged to larger groups were significantly more satisfied with those groups and also were significantly happier. Also, even though people who belonged to age-graded groups were slightly more satisfied with these groups, they were significantly less happy. In addition, people who belonged to

church-related groups were slightly more satisfied with these groups, but were significantly less happy. Finally, people who belonged to instrumental groups were slightly less satisfied with these groups than with more expressive groups and were slightly less happy.

Discussion focused on possible explanations for the findings. It was suggested that a "happiness" measure seems more sensitive to effects such as those of voluntary-association activity. As for satisfaction with voluntary associations, it was acknowledged that the mere fact that respondents are taking an active part in life may be a key factor to their well-being. As explanations for the findings related to size of voluntary associations, it was suggested that large group activity may be less emotionally demanding and/or may allow contact with more potential friends. For age-graded groups, it was suggested that many older people may maintain a view of themselves as "younger" as the result of non-age-graded activities. For church-related groups, it was suggested that prior findings are due to the relationship between religiosity and well-being rather than characteristics of such groups. Finally, for the instrumental-expressive variable, it was suggested that older people such as in this sample may not value "feeling useful" as much as has been thought.

Suggestions for future research included alternative methods of measuring association satisfaction, longitudinal analysis with representative sampling, and further investigation of voluntary-association characteristics.

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CHAPTER I

INTRODUCTION TO THE RESEARCH PROBLEM

The amount of "free" time that people have on their hands is likely to increase in the coming decades (Hendricks & Hendricks, 1977). This statement is particularly true for the older portion of the population of modern societies, since these societies are able to support a non-working segment, and, in addition, these societies are those whose citizens are enjoying increasing longevity (deGrazia, 1962). Freed from the necessity to continue to earn their living and with an increasing number of years of potential retirement, many older people are faced with the task of finding satisfying activities to occupy their added time (Hendricks & Hendricks, 1977). After all, few people relish living longer lives if this longevity simply means added years of disability and boredom. In recent decades, therefore, social scientists have been examining factors which relate to life satisfaction and happiness among the elderly. Indeed, Havighurst (1961) expounded the goal of gerontology as that of "adding life to years" as opposed to "adding years to life." In 1968, he further added:

One of the principal unanswered questions about the human life cycle is--how do people structure their lives after about age 65? Under what conditions do they achieve satisfaction? This is the central problem of the social psychology of aging. (p. 67)

Consequently, the nature and results of leisure activity among the elderly in particular have become topics of increasing importance (Dumazedier, 1967; Kaplan, 1975).

One possible use of leisure time by older persons is participation in voluntary associations. Researchers in one recent study, for instance, found that 79.8% of their representative sample of elderly people belonged to at least one voluntary association (Babchuk, Peters, Hoyt, & Kaiser, 1979). Trends suggest that future cohorts of older people may belong to and participate in voluntary associations to an even greater extent than current cohorts of the elderly (Hendricks & Hendricks, 1977; Johnson, 1975; Neugarten, 1975). But, although researchers have long studied the who, what, when, where, and how of voluntary-association participation, only recently has the individual implications of voluntary-association participation been a topic of research interest (Edwards & Booth, 1973). What are the consequences of voluntary-association participation on the psychological well-being of older people? This dissertation examines past research on this topic and presents the results of a study examining a number of theoretical and methodological issues related to it. Before examining past research, however, two key concepts--viz., "voluntary association" and "psychological well-being"--need to be defined.

Definition of Key Concepts

Voluntary Association

The history of the sociological literature on the voluntary association

begins in 1895 with an article by C. R. Henderson in the first volume of the American Journal of Sociology. In his article, "The Place and Function of Voluntary Associations," Henderson used the term "voluntary association" to "designate that form of social cooperation in which the conscious choice of each member determines his membership" (p. 329). More recently, researchers have examined "voluntary associations" under the classification of "formal organizations." According to Champion (1975), a "formal organization" is a "predetermined arrangement of individuals whose interrelated tasks and specialties enable the total aggregate to achieve goals" (p. 1). Hughes (1952) has identified five different kinds of formal organizations which are characteristic of contemporary society; voluntary associations are groups such as the American Psychological Association and the Rotary Club--as opposed to military organizations (e.g., the U.S. Army), philanthropic organizations (e.g., universities and hospitals), corporation organizations (e.g., General Motors), and family business organizations (e.g., small businesses and the Mafia). In some of the literature, such groups must possess charters and other formal evidence of their existence to qualify as "voluntary associations" (e.g., see Taietz, 1976). For our purposes, however, a "voluntary association" is a voluntary group organized to the extent that it: (a) has a name, (b) meets regularly at some level of its structure, and (c) has some consensual purpose or function. Unlike corporations or businesses, however, the main purpose is not purely economic. In keeping with the sociological literature on

voluntary associations, church and Sunday School membership is not included in our definition of voluntary association participation. (Instead, for future reference, church-related voluntary associations are construed to be organizations within the church framework such as missionary circles, Methodist Men, and church senior citizens' groups.)

The use of the term "voluntary association" for the kind of formal group activity that we wish to examine is potentially fraught with difficulty. After all, Rose (1960) has said:

The assumption is that a man, a rational creature, in certain circumstances weighs the advantages and disadvantages of joining a certain group or participating in a collective enterprise and, on the basis of the outcome of this deliberation, joins this group. Such a group would be a voluntary association. (p. 667)

But, one could very well argue that people may not join or maintain membership with complete freedom. (In fact, this very point will be presented later on in this paper.) Indeed, even if one disregards the philosophical arguments concerning free will versus determinism, the possibility of a norm of participation in such groups exists, at least in the middle class; this norm exists to the extent that people may even exaggerate their self-reported degree of participation (Hausknecht, 1962). Nevertheless, certainly these groups can be considered "voluntarily joined" in comparison to the conscription into traditional military groups and being born into family groups, for instance. Indeed, most fraternal voluntary associations, for example, maintain that the desire for membership in their groups must be "totally voluntary," and these groups do not engage in membership drives

(e.g., see Schmidt, 1973). Despite this potential difficulty, though, we will use "voluntary association" (hereinafter abbreviated "VA") to designate our type of groups, since this usage is consistent with past terminology, especially in previous research on this topic in the social-gerontological literature.

In summary, then, a VA is a voluntarily joined group organized to the extent that it has a name, meets regularly at some level of its structure, and has some consensual purpose or function which is not purely economic, excluding churches and Sunday School groups.

Psychological Well-Being

"Psychological well-being" is a term for a concept which has been a popular topic of study in social gerontology in recent years. (For a comprehensive review of the findings related to aging on this topic, see Larson, 1978). As we reported in the initial paragraphs of this dissertation, the primary reason for the recent concern with this topic has been the attempt to find factors which "add life to years." A little over 30 years ago, Pollak (1948) first delineated the problem of social adjustment among the aged and presented a research planning report for its study. Subsequent research on psychological well-being was to a great extent stimulated by this early work (Riley & Foner, 1968). The concept we are calling "psychological well-being" is not exactly synonymous with "mental health" (cf., Campbell, Converse, & Rodgers, 1976). After all, someone may very well report themselves as "happy" and "satisfied" yet may in some quarters be

considered a representative case from the Diagnostic and Statistical Manual (see Jahoda, 1958). Nevertheless, we feel that the concept of psychological well-being is a useful one for study. First of all, as we have reported, social scientists have been interested in determining factors related to happiness and satisfaction due to increased leisure time and longevity. Indeed, predictors of longevity include having greater life satisfaction and a higher happiness rating (Palmore & Jeffers, 1971). Thus, this study will not focus upon any physical benefits of VA participation (although we will mention this subject later on), but instead we will concern ourselves mainly with the effects of VA participation on feelings, on a person's subjective sense of well-being. According to Neugarten, Havighurst, and Tobin (1961), an individual is

regarded as being at the positive end of the continuum of psychological well-being to the extent that he: (a) takes pleasure from the round of activities that constitutes his everyday life; (b) regards his life as meaningful and accepts resolutely that which life has been; (c) feels he has succeeded in achieving his major goals; (d) holds a positive image of self; and (e) maintains happy and optimistic attitudes and mood.

Similarly, Lemon, Bengtson, and Peterson (1972) have defined "life satisfaction" as "the degree to which one is presently content or pleased with his general life situation." Indeed, Neugarten, Havighurst, and Tobin (1961) have said that "psychological well-being" is "if nothing else, an awkward phrase" and, instead, called their scale a measure of "life satisfaction." Other researchers, too, have differed on what to call this sense of well-being (Bradburn & Caplovitz, 1965). This paper will utilize

"psychological well-being" for the concept, however, since we are concerned with measures which incorporate both "life satisfaction" and "happiness."

In summary, then, we define "psychological well-being" as an individual's self-assessment of happiness and satisfaction with his present and past life.

Before outlining the goals of our research on the relationship between VA participation and psychological well-being in older people, we will review past research efforts, discuss assumptions of the literature, and report on theoretical and methodological concerns.

Review of the Literature

The first formal study of VA membership and psychological well-being seems to have been done by Folsom and Morgan (1937). They reported a positive correlation between VA membership and perceived happiness in their sample of elderly people. In general, as reported earlier, research has been carried out under the rubric of attempts to determine the factors contributing to the overall psychological well-being of older people. In applying their various measures of well-being, early researchers found positive relationships between the two variables. In cross-sectional studies--Bley, Goodman, Dye, and Harel (1972); Burgess (1954); Cavan, Burgess, Havighurst, and Goldhamer (1949); Havighurst and Albrecht (1953); and Pihlblad and McNamara (1965) all found positive relationships between the two variables, using various measures of well-

being. Significant relationships were found in longitudinal studies by Graney (1975), Palmore (1979), and Palmore and Luikart (1972).

Other research, however, has claimed little, if any, direct relationship between VA membership and psychological well-being; this research has generally taken into account the fact that other variables are significantly correlated with both well-being and VA participation and, accordingly, has controlled for these variables. Cutler (1973) has stated this research problem quite explicitly, warning that people who are more likely to participate in VA's tend to be of higher SES and/or in better health than non-participants, which are indeed two factors also positively correlated with psychological well-being (Adams, 1971; Spreitzer & Snyder, 1974; Streib, 1956). Cutler gave the Life Satisfaction Index, Form A (LSIA) (a measure of well-being developed by Neugarten et al., 1961) to a sample of elderly people and noted that "after the dispositional or compositional effects of status and health are partialled out, voluntary association participation bears at best a weak and statistically nonsignificant relationship to life satisfaction" (p. 99). Bull and Aucoin (1975) replicated Cutler's study using a sample of older people from another city. Basically they found the same results and concluded that

there is now, therefore, stronger evidence to support the proposition that with the distributional effects of health and status held constant, voluntary association participation of the elderly has a small and nonsignificant relationship to life satisfaction. (p. 76)

Previously, Lemon, Bengtson, and Peterson (1972) had found no significant relationship between activity in VA's and well-being when people in poor

health were not included. Similarly, Edwards and Klemmack (1973), using items from Adams' (1969) scale, found that controlling for SES reduced the relationship and, therefore, concluded that "involvement in voluntary organizations, in the final analysis, does not contribute independently to predicting life satisfaction" (p. 500).

As Cutler (1976) has noted, then, research in this area has been "marked by inconsistent findings" (p. 335). On closer inspection of the research, one is particularly struck by a number of methodological and theoretical inconsistencies and difficulties. In order to understand the exact nature of these difficulties, we will need to examine some assumptions of the literature on VA's and well-being.

Assumptions of the VA Literature

One assumption which has been evident in the writings on VA's is that the elderly are particularly prone to be lonely and depressed, since both professionals and laymen tend to stereotype the elderly as the least happy of all age groups (Cameron, 1972). This assumption has some basis in fact, since at least one national study has shown that the aged are prone disproportionately to emotional and mental problems (Butler, 1975). The elderly do tend to undergo a restriction in their social relationships upon retiring, dropping out of activities due to illness, and losing friends and relatives to death (J. Smith, 1966; Fine & Smith, 1962). Lowenthal (1968) has asserted that such age-linked social losses as widowhood and retirement do have a very strong impact on the sense of well-being and morale

of the elderly.

Since the aged have been assumed to be prone to loss of morale and psychological well-being, researchers have often further assumed that to replace the losses in their lives is to restore morale and well-being or even to maintain it. (This position seems particularly to be advocated by activity theorists, a point which will be discussed later in this paper; see Atchley, 1972.) Leisure in general in old age has been seen as capable of replacing lost sources of personal meaning and of social integration (Rapoport & Rapoport, 1975), and in particular, Back (1976) has noted that professionals who work with the aged have assumed that VA's are substituted for the loss of family, work, or community affiliations. VA membership, thus, has been assumed to be able to satisfy the needs of the elderly, needs whose previous source of fulfillment has been lost. For example, Rose (1960) has stated that the VA is "ideally structured to satisfy the needs of people who are seeking social contact in modern society" (p. 673). Similarly, Maxwell (1962) has asserted that "group participation . . . represents far more than filling in time or having fun. Many basic needs and ingredients for successful living are answered only through groups, whether family, community, or friendship" (p. 100). (Interestingly enough, Orum, 1966, has viewed the unusually high VA participation of Blacks, which has been confirmed by researchers such as Clemente, Rexroad, and Hirsch, 1975, as "compensatory," in the sense of fulfilling needs not readily available in the larger society. Williams, Babchuk, and Johnson,

1973, have suggested that Orum's theory is relevant to any segment of society which is subordinate socially, contending that those people in lower status positions affiliate and participate in VA's "for prestige, ego enhancement, and achievement denied them in the larger society" [p. 638].) Indeed, Kaplan (1970) has maintained that "in general . . . older people . . . have special needs for the activities and social contacts which voluntary organizations provide" (p. 334). After all, as Wagner (1953) has reported, the Golden Age Club movement was begun because social scientists found that "in spite of provisions for individualized casework service, medical care, and financial security, the old people still had a sense of loneliness, idleness, a feeling of being useless and unwanted" (p. x). For, as Weiss (1973) noted, "money is no panacea for loneliness" (p. 84). And as Bucke (1962) has reported, although the first clubs were set up for physical warmth and shelter for the elderly, the development of clubs today springs from a need for fellowship and mental well-being of individual members.

Following these assumptions, researchers have suggested that their failure to find a significant independent effect of VA membership on psychological well-being is that somehow VA's are not meeting the needs that they are expected to fulfill. For example, Ward (1979) has said, "To the extent that voluntary associations offer little more than 'lukewarm' social integration and personal involvement, they fail to serve as accommodations to new needs in the use of time created by aging" (p. 444). He has also

suggested that many VA's "are linked to the roles and activities of young adulthood and middle age; relatively few are geared to the interests and needs of older people" (p. 444). This same argument has been made by Zalegnik and Moment (1964).

Other researchers, however, have argued that VA's are not capable of making up for losses and do not really serve to satisfy any particular needs for the elderly. For example, Wilensky (1961) and Townsend (1968) have viewed VA membership as not likely to be effective in making up for the loss of primary attachments, and, indeed, Rosow (1967) has asserted that:

There may be no effective substitute for the loss of any major social role except an equally significant status which is as highly valued and rewarded. Consequently, strategies to relieve basic status loss in old age through the establishment of Golden Age Clubs, glamorizing retirement leisure, and similar diversions are fundamentally bankrupt. (p. 317)

Support for the idea that VA's are not necessarily meeting or seen to meet needs can be found in the conclusions of several studies. For example, Pihlblad and McNamara (1965) found that less than two-fifths of their sample of older people participated in civic, social, or professional groups, perhaps because of the small number of such groups in their studied area. Nevertheless, relatively few of these people saw any need for more clubs, and most tended to reject proposals for "Golden Age" or other clubs for the aged. Trela and Simmons (1971) have reported that for those people who stated that they were not interested in joining a senior center, as well as for some members, the center's activities were seen as "foolish" or a

"waste of time." One member said, "I just go to the center for bridge lessons. I don't need it for anything else. . . . I'm not ready for it yet." In the same vein, Downing (1957) found that when respondents were asked to give reasons for their not being interested in joining a social club for the aged, the statement most frequently given was "no need" or its equivalent.

Nevertheless, some people do perceive VA's as fulfilling needs in their lives. For example, although Trela and Simmons (1971) have reported that for people who joined a senior center, activities were the greatest incentive (filling time that would otherwise be empty), 12% of the members included the need for companionship among their reasons for joining. Several new arrivals in the community expressed a desire to meet new people; others spoke of increasing their circle of social "contacts," while still others viewed membership as at least partially compensating for the loss of a close friend or spouse or the perceived neglect of adult children. Informal studies have also found such effects. (For a review of these studies, see Starling, Note 1.)

With the knowledge of some of the basic assumptions of the literature on this topic, we are now in a position to examine some of the difficulties which have occurred in past studies and previous theoretical frameworks.

Difficulties with Past Studies

Theoretical Difficulties

Why people affiliate at all has been a question often asked. Crosbie

(1975) has noted that the reason most accepted for why adults affiliate with others is the assumption that such affiliation is motivational--that individuals affiliate with groups to satisfy certain motives or needs, whatever they may be. Schachter (1959) has asserted that "there is no doubt that such [affiliative] needs are particularly powerful ones and that association with other people is a necessity for most of us" (p. 2). Festinger (1951) has placed the reasons why people join groups voluntarily under three general headings: (a) the attainment of important individual goals, such as power and prestige; (b) attraction of the group's activities such as discussions and games; and (c) the satisfaction of needs best mediated through groups, such as the needs for belongingness, recognition, and security. Schachter (1959) has given similar reasons.

One factor which seems to have been neglected in the previous research on VA's is the individual's unique profile of reasons for joining, coupled with the uniqueness of each and every VA. Conner, Powers, and Bultena (1979) have maintained that "concern should be focused more on identifying personal needs that are met by interaction" (p. 120). The identification of personal needs is no easy task, however, since researchers seem to differ on exactly what needs the elderly have. Indeed, Rosow (1967) has stated, perhaps somewhat tongue-in-cheek, that "problems of old age are of two general kinds: those that older people actually have and those that experts think they have" (p. 1). Researchers have cast about for various frameworks for viewing the aged, but as Kart

and Manard (1976) have noted, at present no comprehensive theoretical framework exists within which to address the question, "What happens to human beings socially as they grow old?" But historically a number of opinions and supporting theories have been advanced concerning the social needs of the elderly. For example, Wagner (1953) has asserted that the older person possesses the same basic needs as she/he had earlier in life. This opinion is essentially held and formalized by adherents to one of the traditionally most popular theories of social gerontology--viz., activity theory (e.g., Lemon, Bengtson, & Peterson, 1972). This theory holds that the norms for old age are the same as those for middle age and that the older person should be judged in terms of a middle-aged standard for measuring success; further, this theory asserts that if older people must relinquish roles, then they must be given new useful roles to take their place. This assumption is a basic one in the literature on the value of VA's as substitutes; after all, activity theorists have been the main advocates of VA participation for the elderly (e.g., see activity-theorist advocate Palmore, 1975, for his suggestion that America follow Japan's example of establishing "more--and more active--Senior Citizens Clubs," p. 138). Indeed, one problem with the early research on VA participation and well-being is that the first scales--e.g., Cavan et al. (1949) and Havighurst and Albrecht (1953)--were based on activity theory, with the developers making the explicit or implicit assumption that the greater the extent of social participation, and the less that the person varies from the

pattern of activity that characterized him/her in middle age, the greater is his/her well-being (Neugarten, Havighurst, & Tobin, 1961).

On the other hand, Pollak (1948) has suggested that older people's needs may change as they make adjustments to the environment. This opinion has been upheld by another well-known, albeit controversial, theory of social gerontology--namely, disengagement theory (Cumming & Henry, 1961). These theorists have asserted that old people gradually become preoccupied with themselves, leaving behind willingly the roles of younger days. For instance, Cumming and Henry have argued that in activity theory:

the old are apparently expected to maintain indefinitely a desire for instrumentality, or competence in managing the environment. Thus, "feeling wanted," a middle-aged feeling, is projected onto old people as an end in itself, because old people are believed to want to continue to be needed because of their usefulness to others. . . . Why is it not suggested instead old people may want recognition for having been useful, for a history of successful instrumentality? (pp. 19-20)

Thus, disengagement theorists have asserted that old people want to withdraw from activities such as VA's and have implied that to be "successful agers," old people must disengage, essentially from life itself. However, this theory has serious flaws and is generally now looked upon with disfavor (e.g., Maddox, 1964).

Despite the fact that disengagement theory is flawed, researchers have continued to examine especially the relationship between VA participation ("formal activity") and psychological well-being using a disengagement versus activity theory framework. It is fair to say that activity

theory has found support in such studies (e.g., see Palmore, 1979, for a recent study which relates findings to this framework). As far as we could ascertain, only one study--that of Harris and Bodden (1978)--provides experimental evidence for activity theory, however. Since this study seems unique in that regard and since it examines formal activity, then we feel that a detailed account of it is in order. Harris and Bodden isolated two groups--a disengaged group who took no part in any type of organized social activity (blue-collar people who were listed as participants in a Meals on Wheels program) and an active group who took part in a Foster Grandparents program. Both groups were low income. Volunteers from the Meals on Wheels program were randomly assigned to control and experimental conditions. Experimental subjects, after pretesting, participated in six sessions of an activity group experience. These group sessions were held once a week for a total of six 2-hour sessions. Sessions consisted of a variety of activities--such as a play by first-grade children, a discussion led by a Social Security expert, a sing-along led by a group of university students--for the first hour--and then in the second hour, which was divided into three 20-minute segments, first members shared with others their favorite poems and Bible verses, then a period of games such as bingo were held, and then 20 minutes for socializing. The researchers hypothesized that the activity group would demonstrate higher levels of psychological functioning than the control group. They found that the experimental subjects did show greater life satisfaction (as measured by

the LSIA), less anxiety, more extroversion, and more ego strength than did the control subjects at posttesting and an increase over their own post-test scores. In addition, the experimental group attained a level of psychological functioning comparable to the baseline group of elderly persons who had been active for some time. The researchers suggested, then, that their data indicate that social activity, whether induced by a special program or naturally occurring, is beneficial to the participants. In addition, even Campbell, Converse, and Rodgers (1976), in their study of The Quality of American Life, concluded that older persons "may feel better off" if they avoid disengagement from life roles.

As evident from research findings and from theoretical assertions such as those by Schachter (1959) and Festinger (1951), people join VA's for a variety of reasons and needs. One problem with prior theories is that all older people are assumed to be homogeneous. But, as Atchley (1972) and Kaplan (1970) have pointed out, people over 65 years of age are not homogeneous by any means, although they do share common experiences as the result of being elderly. Indeed, Havighurst (1968) has argued that neither activity nor disengagement theories, for example, are adequate--but what is needed is a theory of the relationship of personality to successful aging. Thus one should not assume any blanket needs for any one group of people--and one cannot assume that VA's in general or especially one particular VA will be of benefit to the given individual. The problem with research such as that of Harris and Bodden is that we do not really know

what aspect(s) of activity were related to well-being. After all, all types of activity may not benefit everyone. Indeed, Arthur (1954) has offered the following caveat:

Any organization whose objective is to reduce the devastating effects of isolation and boredom has to cater to individual (our italics) needs. You can't just hunt up the nearest equivalent to a "Golden Age" club and dump your mother's oldest sister or your father's uncle there, and bask in your own approval of a duty well done. They may not fit in at all. (p. 189)

And, along the same line, Homans (1950) has noted that unless a person is a member of a group "he will have an impaired capacity for maintaining his personal equilibrium under the ordinary shock of life. This does not mean that, for health, he must be a member of any particular group: not every group will be good for him" (pp. 313-314). After all, the possibility cannot be ruled out that participation may have negative consequences for the individuals involved (Edwards & Booth, 1973). Strupp, Hadley, and Gomes-Schwartz (1977) have cited Davison as observing that with groups in general there is a danger of inadequate attention to the needs and "vulnerabilities" of individual members. They have initiated the topic of the possibility of "negative effects" in group therapy, for instance, such as lower self-esteem and depressive breakdown. Cartwright (1972) has discussed this possibility. He says:

Consider first some matters having to do with the mental health of an individual. We can all agree, I believe, that an important mark of a healthy personality is that the individual's self-esteem has not been undermined. But on what does self-esteem depend? From research on this problem we have discovered that, among other things, repeated experiences of failure or traumatic failures on matters of central importance serve to undermine one's self-esteem. We also know that

whether a person experiences success or failure as a result of some undertaking depends upon the level of aspiration which he has set for himself. Now, if we try to discover how the level of aspiration gets set, we are immediately involved in the person's relationship to groups. The groups to which he belongs set standards for his behavior which he must accept if he is to remain in the group. If his capacities do not allow him to reach the standards, he experiences failure, he withdraws, or is rejected by the group and his self-esteem suffers a shock. (p. 354)

Thus, one important factor may be the level of aspiration that a particular group sets. We will say more about this point later in this paper. Lowy (1967) has reported that one of the "roadblocks" in group work with the aged is that people tend to place the aged in one category, instead of forming groups on the basis of characteristics other than age. Carp (1977) has asserted that one needs to be concerned with both person traits and the environment; a particular intervention (such as the establishment of a particular "Golden Age Club") may improve well-being for persons with certain characteristics but decrease it for others. For example, she says, the move to an environment oriented toward social activity can be highly satisfying for old people with strong needs for involvement but deleterious for those with strong needs for privacy. After all, as Kutner et al. (1956) have contended, "Not any [their italics] activity . . . can lift morale. . . . Those that are not basically satisfying needs do not contribute much to the individual's adjustment" (p. 104).

That participation in a certain VA can have negative effects is suggested by comments from members who attended senior citizen center activities. For example, Trela and Simmons (1971) have reported that

some members view their membership (or greater participation) as "not consistent with their self-image." One said, "I liked playing cards and all but those old people depressed me," and at least one non-member said, "it makes you feel old to associate with old people only." Feeling depressed and old is not likely to be beneficial to one's psychological well-being.

One problem with past research is that consideration has not been given to the fit of the individual to the particular VA. This lack of consideration seems due mainly to the emphasis on activity theory which has permeated research in this area.

Although we adhere to the general belief that older people do have the same basic needs that they had earlier--thus, we support the basic assumption of activity rather than disengagement theory--we do not believe that all activity necessarily increases psychological well-being. Lemon, Bengtson, and Peterson (1972) defined "activity" as "any regularized or patterned action or pursuit which is regarded as beyond routine physical or personal maintenance" in their formal statement of activity theory. They hypothesized that frequency of activity is related to potential role support--therefore, the greater the frequency of activity, the greater the opportunity and probability that role supports will result from the interaction. Thus, their main hypothesis was that the greater the activity, the greater one's life satisfaction. Among other types of activity, they hypothesized that participation in VA's is directly associated with life satisfaction or

psychological well-being. In keeping with their theoretical framework, VA activity was measured by the number of memberships and the degree of participation. Psychological well-being was measured by the LSIB (an alternative to the LSIA developed by Neugarten et al., 1961). Lemon et al. found no significant relationship between their measures of VA participation and psychological well-being.

Methodological Difficulties

Need for a More Qualitative Approach

As we have just shown, due to the influence of activity theory, previous research on VA's as a whole has not examined in any depth the quality of VA memberships for the elderly. Instead, researchers have relied totally upon simple quantitative approaches, counting only number of memberships and/or frequency of participation. For example, Bull and Aucoin (1975) utilized a three-part index of participation: number of association memberships, number of associations very involved in, and frequency of attendance at association meetings. Similarly, Palmore and Luikart (1972) measured organizational activity by the sum of the number of VA meetings which the respondent reported usually attending each month. Although such simple quantitative approaches should not be abandoned entirely (e.g., Kaplan, 1964), the value of a qualitative approach has been suggested (Conner, Powers, & Bultena, 1979) and demonstrated (Lowenthal & Haven, 1968) in a related research area. For example, after obtaining results which indicated that the number and

frequency of interactions with other people were of little importance for the well-being of their elderly sample, Conner et al. (1979) concluded:

The quality, or meaning, of a series of interactional encounters certainly has different, if not pronounced, consequences for the individual's evaluation of his or her life situation. . . . In the past, our predominate approach has been one of counting numbers of contacts or relationships. While not abandoning this approach entirely, we need to balance it by asking questions that elicit our respondents' perceptions about the meaning and significance of their social encounters. (p. 120)

For instance, as Weiss (1973) has reported, "Loneliness is not simply a desire for company, any company. . . . Loneliness is often uninterrupted by social activity; the social activity may feel 'out there,' in no way engaging the individual's emotions" (p. 13). Also, as Gubrium (1973) has noted, the problem with the activity theory approach is that "a person's sociability is not simply quantitative such that he feels satisfied with his life as long as he possesses a certain amount of it. Rather, . . . evidence suggests that sociability varies in quality" (p. 16).

Only one recent study, that of Ward (1979), has attempted to explore the meaning of VA participation to older people. In his study, Ward not only asked older people about the types of VA's to which they devoted their time, but also about the nature of and reasons for their participation. As in some previous research, Ward found little independent contribution to well-being from VA participation after health and SES were controlled. But he did find that two types of VA activity led to somewhat surprising effects--viz., card-players had overall lower well-being, even after health and SES were controlled, and those people who were organizational

leaders did not have higher scores on well-being, once health and SES were controlled.

Although Ward has initiated a qualitative approach, his research has only just begun the process; a more in-depth study of qualitative (as well as quantitative) mechanisms is needed. One qualitative element which needs to be examined is the individual's satisfaction with his/her unique pattern of VA membership. Indeed, Cutler (1979) has documented the multidimensionality of psychological well-being measures and has suggested that one question for future research should be, "What kind and what magnitude of organizational memberships predict satisfaction with organizational involvement?" Similarly, Rose (1960) posed one future research problem as, "Under what conditions are VA's for the elderly effective organizations in satisfying their needs?" And in 1970, Rose stated:

Obviously these [old age] associations have been formed to meet a need among their elderly participants. Whether they are structured enough, or offer enough activity, to meet the need satisfactorily is something almost completely unknown, as there have been practically no evaluative studies of these associations. (pp. 454-455)

Concern with Satisfaction

Given the multidimensionality of well-being scales, one obvious contention that can be made is that unless the individual older person is satisfied with his/her current VA experiences, then that membership cannot be expected to contribute to a high level of psychological well-being and, indeed, if dissatisfaction is of a certain magnitude, may contribute to a

lower level of psychological well-being. Campbell, Converse, and Rodgers (1976) have asserted that whatever global report a person gives of his/her overall sense of well-being should be some compound of his gratifications and disappointments with more specific features of life. Their research confirmed the utility of a linear additive model in accounting for reports of life satisfaction. They maintain that:

We must learn what people make of their resource situation in terms of our satisfaction measures, before we can arrive at any adequate understanding as to how resources are influencing the sense of well-being. This is true simply because people in exactly the same situation with respect to a given resource can vary quite widely in the evaluation of that situation. And if we wish to predict variation in feelings of well-being, knowledge of these evaluations is generally more helpful than knowledge of the subjective resource situation. (p. 376)

By relying mainly on simple quantitative measures, previous researchers have seemed to assume that VA members are completely satisfied with their membership(s)--and perhaps some reasons exist for adhering to this belief. As Ross and Zander (1957) report, "Of course, all organizations satisfy some of the needs of their members otherwise the membership could not exist because persons would not belong to it" (p. 328). One could argue that those people who are not satisfied with their membership will drop out. For example, Rose (1960) has contended that "when members feel that the association is not successful or when their time is being devoted to dull and routine tasks, their participation in the activity of the association will sharply diminish" (p. 688). Similarly, Edwards and Booth (1973), basing their approach on Homans' theory of

social exchange, view leaving a group as the result of an asymmetrical exchange. Related to this exchange line of reasoning, D. H. Smith (1966) has reported that people who are willing to become high participators in VA's must be receiving some type of psychic reward which makes it all worth their while. In partial support of this contention, Brown (1974) found that those people who expressed less than complete satisfaction with group activities were slightly more likely to have dropped them than those people expressing greater satisfaction.

Yet, at any given time, people who, for some reason or another, are less than completely satisfied with their membership(s) may still be maintaining them. For example, Brown (1974) found that 45% of those he interviewed said that they attended groups of various kinds with some regularity, and 66% said that their group attendance had not dropped in the 10 years before they were interviewed; nevertheless, one-third of those people who attended group meetings said that these experiences were not completely satisfying to them. A number of reasons could account for such dissatisfaction--and for maintenance of membership. For example, the older person in our culture finds him/herself under strong pressure to remain active for as long as possible (Buhler, 1961). Indeed, older people may be strongly encouraged to join, and to the extent that membership is not necessarily "voluntary," but the result of a "push" from someone else, the person may have to learn to enjoy membership--which, of course, may take time (Kaplan, 1960). Thus, the person may feel that she/he

should "hang on," even though currently dissatisfied. In fact, Cartwright (1968) has suggested that some groups remain highly cohesive, for instance, even though their members are experiencing low-reward-cost outcomes, because the members realize that leaving the group would result in even lower outcomes--perhaps, in this case, having nothing to do or no place to go. Probably a number of constraints operate to limit alternative VA memberships; for example, the person may be limited to those groups near to home. Rose (1960) has noted that a few members, usually the leaders, have a sense of "primary responsibility" for the VA and are willing to carry on their activity, sometimes at a real sacrifice. Thus, leaders cannot necessarily be expected to experience higher satisfaction. Indeed, some VA's require regular attendance--or none at all; for example, the Ruritans drop members who miss three consecutive meetings without good reason (information obtained from personal communication with a member). Babchuk and Booth (1973) found that the aged tend to remain in such groups as the Masons, VFW, and DAR, since it is not difficult for them to remain members, even when the infirmities of age force modification in levels of participation. Indeed, Rosow (1967) has observed that some older people attempt, perhaps unsuccessfully, to stay "young" by holding on to their same group memberships. These memberships may become less satisfying as time goes on, however, especially as the VA's composition shifts toward younger people. Ward (1979) has suggested that:

The lack of a relationship between group involvement and psychological well-being may reflect a general lack of "meaty" roles or personally

meaningful involvement. . . . This may be particularly true for the aged, to the extent that they are "shunted aside" by young group members. (p. 444)

After all, Woods (1953) has pointed out that the average old person is not welcomed into younger groups, and both Atchley (1972) and J. Smith (1966) have noted that old people are seen as less desirable than others as members of organizations as well as having fewer chances of becoming officers. In addition, a given member may be displeased with the current group for a number of personal, perhaps even idiosyncratic, reasons. Perhaps the new VA president is a person that she/he cannot stand, perhaps the group has just decided to make June "flower month," in which members learn how to arrange flowers and plan to attend flower shows, but this particular member does not have a great love for flowers and, besides, is allergic to rose pollen. The point is, of course, that many factors, some ephemeral, can contribute to current member dissatisfaction. After all, as Osborn (1966) has maintained: "It is impossible to conceive of a club that is either so static or so dynamic that expressions of not-wanting or not-liking on the part of the members would be eliminated" (p. 352). Thus, one cannot really justify the assumption that members of VA's are necessarily satisfied with their membership(s).

We felt that satisfaction with VA's might be a valuable variable for study for a couple of reasons. One is that, as we have stated, VA satisfaction is likely to relate directly to overall life satisfaction. Campbell, Converse, and Rodgers (1976) found that those people who express

complete satisfaction with their leisure activities are more likely to have adapted well to retirement than those people who are less satisfied. Also, satisfaction measurement should go beyond just measuring degree of participation. After all, Heslin and Dunphy (1964) say that a satisfying group experience involves reaching a desired level of personal participation. Borgotta and Bales (1953) have supported the idea that all persons in a group do not have an equal need to participate. In addition, Campbell et al. also found that their capacity to predict variation on their "Index of Well-Being" was vastly increased (from 18% to 42% of the variance) when they took into account not only differences in resource situations, but also reactions of satisfaction or dissatisfaction with them.

Secondly, satisfaction is important to the organizations themselves. As Secord, Backman, and Slavitt (1976) have noted, "Every human organization, after all, must solve two problems. The first is how to achieve group purposes. The second is how to provide satisfaction to members" (p. 252). As we have pointed out, members may maintain membership even though they are somewhat dissatisfied, but certainly if dissatisfaction reaches a certain level, then they are more prone to drop out. Warren (1972) has discussed the competition among organizations for the allegiance and support of local persons, noting the rivalry that can result when VA's fight over "good members." Certainly VA's need to be concerned with the satisfaction of their members, if they hope to survive such competition.

The Justification for Our Qualitative Approach

In the beginning pages of this paper, we noted Havighurst's (1961) statement that the goal of gerontology is "adding life to years," as opposed to "adding years to life," in view of the fact that few people are interested in long life spans if that means simply more years of the physical, mental, and psychological deterioration often associated with old age. Thus, much research in social gerontology has been concerned with answering the question, "Under what conditions do the elderly achieve satisfaction?" But, over the years, researchers have disagreed on how to best measure "psychological well-being," with some researchers wanting to consider the overt behavior of the person when measuring well-being, using competence or success as the social criteria--and take the risk of imposing one's own values--or whether one should use the individual's own internal frame of reference as a measure of well-being, having him/her evaluate his/her own self--and take the risk that unless one validates this measure against a more objective criterion, one will not be able to escape conscious and unconscious psychological defenses or make meaningful comparisons between and among individuals. Campbell (1976), for instance, has argued for the latter position, advocating the development of measures which tap direct experience rather than objective situations. He purports that although "these subjective measures will not have the precision of indicators that are expressed in numbers of dollars . . . they will have . . . what it is we want to know--the individual's sense of well-being" (p. 118).

Rose (1967) has gone so far as to argue that "there is no value in participation per se; it is only when the individual spontaneously feels the need for participation that it performs any . . . functions for him" (p. 251). Nevertheless, the possibility exists that VA membership may yield some "benefits" even for those people who are dissatisfied with memberships.

Our research is based upon similar reasoning to that of Campbell et al. (1976). They reported that their research

derives from the conclusion that the relationship between objective conditions and psychological states is very imperfect and that in order to know the quality of the experience, it will be necessary to go directly to the individual himself for his description of how his life feels to him. (p. 4)

Bradburn (1969) has noted that many psychologists have felt it is useless to ask a person to rate his/her own degree of happiness "because of the stress put on the distorting mechanisms that people employ to put a good face on things and to mask their true feelings even from themselves" (p. 36). For instance, Wilson (1967) entitled his review article on research related to self-reported happiness "Correlates of Avowed Happiness." Bradburn has asserted that distrust of self-reports evidently comes from two sources--a belief that people may not be able to tell the truth and a belief that people will not tell the truth. As Bradburn notes, the first source implies that the person may tell one that she/he is very happy and believe that she/he is telling the truth, but "really, underneath it all," she/he is not happy--or vice versa, she/he may say that she/he is unhappy when she/he is "really" happy. Bradburn's answer to this source

of distrust is that, as Marcus Aurelius pointed out centuries ago, "no man is happy who does not think himself so." In addition, though, people argue that a person can be "really" unhappy when she/he feels himself to be happy; this position is particularly advocated by psychologists who are interested in unconscious processes. But, as Bradburn and Caplovitz (1965) have noted,

while self-reports yield different classifications of individuals from those provided by other types of measures such as psychological tests or experts' ratings of clinical interviews, there is no evidence that self-reports are any less (or for that matter more) valid than expert ratings or psychological tests for rating people on a mental health dimension. (pp. 5-6)

Indeed, Gordon Allport (1953) even cautioned psychologists that they might be moving in the wrong direction in abandoning self-reports. He said:

The prevailing atmosphere of theory has engendered a kind of contempt for the "psychic surface" of life. The individual's conscious report is rejected as untrustworthy, and the contemporary thrust of his motives is disregarded in favor of a backward tracing of his conduct to earlier formative stages. The individual loses his right to be believed. And while he is busy leading his life in the present with a forward thrust into the future, most psychologists have become busy tracing it backward into his past. (p. 108)

One should note, however, that although I was willing to ask respondents about satisfaction and feelings, I did not ask them what causes their satisfaction--why they are satisfied. For instance, Nisbett and Wilson (1977) present evidence that people cannot report with accuracy the "causes" of their behavior, but instead rely on a priori causal theories to explain their behavior. Thus, the psychological approach seems to be that of discarding such reports as of little value. Sociologists, on the

other hand, are more willing to ask such questions of their research subjects. Two sociologists (Smith & Miller, 1978), for instance, have argued that Nisbett and Wilson have stated their argument too strongly because people can sometimes tell why they do and feel the way they do. I am reminded of being in a colloquium in which the speaker was outlining her research on the reasons why women work. After she had presented a complicated model dealing with variables such as number of children and spouse's income and had reported the equally complicated statistical techniques she was using to analyze her data, she was asked by Dr. George Maddox, "Why didn't you simply ask them why they work?" Although I agree with this reasoning in theory, I was a little disinclined (coming from a background of psychology) to ask my respondents "Why are you satisfied?" or "Why are you happy?"

Bradburn (1969) has asserted that the second source of distrust of self-reports --that people will not tell the truth--calls into play a concern with the amount of lying that occurs in ordinary sample surveys. Perhaps social scientists need to be concerned with this issue. Although I was willing to base my data on self-reports, I was not so naive as to believe that this method would be totally accurate and reliable (but, again, what method is?). But, as in the case with Campbell et al.'s (1976) research, which is reported in The Quality of American Life, the nature of this research was not likely to be seriously distorted by the effect of biasing answers toward happiness. This distortion

might be serious if one were primarily interested in determining the proportion of people in a particular population who said they were "very happy," but is not necessarily serious if one is primarily interested in the relationship among many different variables. (p. 38)

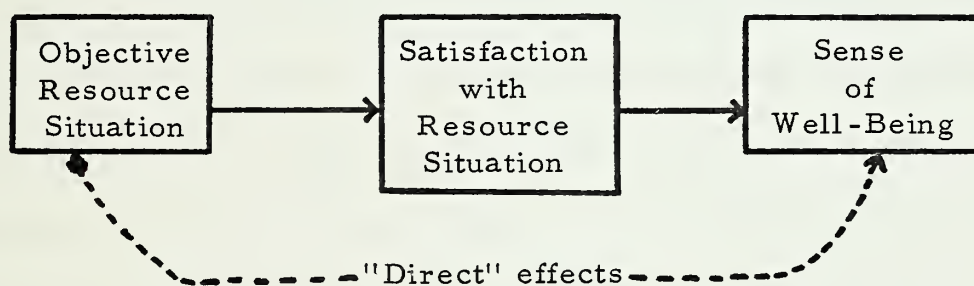
However, as Campbell et al. (1976) have noted, we can take into account the effects of one kind of bias--that of social desirability. Cook and Selltiz (1964) have asserted that most people have social desirability tendencies; that is, most persons will try to give answers that make themselves appear "well-adjusted, unprejudiced, rational, open-minded, and democratic." Lawton (1977) has noted that in research on psychological well-being one needs to guard against the effects of social-desirability bias. In particular we were concerned with this effect, since Campbell et al. found that as age increases the tendency to provide socially desirable responses increases. Thus, in order to minimize the effects of social-desirability bias, we used both prevention and cure tactics in our research. In attempting to prevent or at least lessen such effects, we employed our best efforts in reassuring the respondents and in making them feel at ease. We tried to develop some initial rapport by beginning the interaction with general conversation so that the respondent could be assured that we "meant well." Once we sensed that the respondent seemed reassured, we began the interview with non-threatening, "factual" questions. Respondents were also informed that their responses would be held "in strict confidence" since "we are only interested in the overall responses of everyone." Despite these efforts, we were concerned that social-desirability bias would still creep in, so we decided to employ a

measure of social-desirability tendencies in order to examine and control for such effects. Therefore, we selected items from Marlowe and Crowne's (1964) scale to examine the possibility of systematic effects of social desirability. This scale consists of items which met the criteria of being culturally approved but untrue for virtually all people, and in addition, having minimal pathological or abnormal implications and no psychopathological content. A test-retest correlation of .88 was found for the scale, according to Marlowe and Crowne. In addition, experiments showed that those who scored high on this scale were more responsive than those who scored low to perceived situational demands and were more likely to respond affirmatively to social influence. Marlowe and Crowne have reported that "individuals who depict themselves in very favorable terms on the scale can be understood as displaying a social-desirability response set" (p. 22).

We selected 10 items from the "Personal Reaction Inventory" of the Marlowe-Crowne Social-Desirability Scale. Items were selected to be appropriate to the particular age group of the sample (i.e., in particular, no school-related items) and with the desire to keep this part of the interview relatively short. Five of these items came from the "assert good" and five from the "deny bad" subscales (see Campbell et al., 1976). Unknowingly, we chose the same scale that Campbell et al. used in examining social desirability in their large-scale study. Campbell et al. used six items (one of the same ones used in this study). They found

"edges of bias," to use their phrase, but overall controlling for this variable produced little change: The correlation between their happiness item and their Index of Well-Being was .49; removal of the social-desirability effect reduced it to .48. Nevertheless, we controlled for this variable in our study.

With these preliminary matters taken care of, we were interested in examining the more qualitative aspects of VA participation and well-being. As we have pointed out, Campbell et al.'s (1976) main concern in their large-scale study was with the "quality of life" in America. Our research is based on the same kind of reasoning which underlies their research. They examined satisfaction with resource situation in comparison to objective resources for relationships to well-being. Thus, they pictured a diagram to indicate their focus:



(From Campbell et al., 1976)

Using this schematic approach, Campbell et al. found that their set of 17 domain satisfaction scores explained 54% of the variance in overall well-being. As they noted, though, it really would be impossible to ask people questions about every possible aspect of their lives; instead, "the simple

expedient of asking people to carry out some mental summarization, so that more global feelings can be captured in a very few items, is manifestly worth some loss in reliability" (p. 493). They cite evidence that the more "coverage" of items, the more the predictive capacity.

We felt that such a technique could be useful in researching the relationship between VA participation, VA satisfaction, and psychological well-being in elderly people. Recently, Medley (1976) purported to demonstrate the value of analyzing determinants of life satisfaction via path analysis. His data were taken from Campbell et al.'s study. Path analysis is both a statistical technique and a method of interpretation. As a statistical technique, it is no more than a series of multiple regression equations, but as a method of interpretation, it is valuable in making explicit the assumed relationships among variables (Duncan, 1966). Also, path analysis provides a useful technique of decomposing the correlations among causally ordered variables and parceling the effects of an independent variable into its direct effects and into effects which are mediated by intervening variable(s) (Alwin & Hauser, 1975; Duncan, 1966). To be more specific, path analysis involves setting up a proposed model of causal relationships in a system of independent and dependent variables. The model that is developed may be presented either by diagram or by a series of equations. Since the diagrammatic presentation has the advantage of clarity, we will use this approach and will present the generic path model for later analysis in the next chapter.

Markides and Martin (1979) have agreed with Medley's use of path analysis, but argue (as actually Medley did himself) that his study does little to advance theory and, indeed, approaches the tautological to say the least. This tautological tendency was a concern of Campbell et al. and was the main reason why they did not total their submeasures to get a measure of overall well-being. We agree, of course, that simply asserting that satisfaction with VA's is associated with overall psychological well-being is of no great theoretical importance; however, we believe our model will help examine and explain past findings and will aid in determining the course of future research in this area. For instance, Markides and Martin have noted that Cutler's conclusion of "self-selection," determined after controlling for health and SES,

illustrates two problems of much of the research on life satisfaction: First, the problem of causal ordering of variables and second, that many correlates of life satisfaction become insignificant once controls for such factors as health and socioeconomic status are introduced. If theory building is to be advanced, these observations must be taken into consideration. (p. 186)

Instead of using satisfaction with various domains to determine overall well-being as Medley (1976) did, Markides and Martin (1979) chose health, income, education, and activity to use as their variables in predicting psychological well-being. These researchers noted that health, income, and education have been consistent predictors of well-being (see Larson, 1978). Activity was an intervening variable between those exogenous variables of health, income, and education and psychological well-being. Their measure of activity consisted of both informal and formal

pursuits. Their formal activity measure consisted of items relating to frequency of church attendance, membership in VA's, and whether respondents were officers or committee members in any organization. Their analysis was of respondents of working and lower class background. They found that their model was consistent and suggested that researchers may also attempt to examine possible differences in the intervening role of formal versus informal activity measures.

We, then, felt that an approach such as that of Markides and Martin (1979) could be useful and that satisfaction with VA's and formal VA participation would make useful intervening variables between our exogenous variables and our measure of psychological well-being. In our process of developing this model, we were concentrating on developing a model which involves the variables we thought were most likely to explain past findings. We should perhaps at this stage point out that membership in various organizations appears to provide the relatively least amount of satisfaction for persons of all ages--as opposed to living quarters, work, marriage, and so on (Cutler, 1979). Similarly, Campbell et al. (1976) found that their respondents reported VA's as a rather unimportant part of their lives. In their overall sample of adults, they found that satisfaction with organizations explained 4% of the total variance in overall well-being. We originally conceived of asking respondents to rate the importance of VA's in their lives. However, we decided to forego such an enterprise; Campbell et al. found that when they took account of the direct domain

importance ratings provided by the respondents, they failed to find any detectable increase in the power of the domain satisfaction scores to explain variations in response to their Index of Well-Being. Thus, they seemed to feel that this type of measure is perhaps more prone to defense mechanisms. For example, those respondents who were unmarried and who reported themselves as dissatisfied with their family life nevertheless rated marriage as unimportant in their lives. Thus, we did not necessarily expect to find an extremely strong relationship between VA participation and well-being, but instead were more concerned with examining the relative effects--both direct and indirect--of these variables. We also had other purposes in mind for our overall model. We will deal with these later on in the paper.

Other Qualitative Variables

Besides the qualitative consideration of satisfaction with VA's, on another level, further qualitative analysis will include investigation of characteristics of VA's. After all, satisfaction with membership in VA's and psychological well-being could depend upon various characteristics of VA's. Indeed, VA's differ in a number of ways, such as the degree to which they are formally structured (Edwards & Booth, 1973). Cutler (1973) and Bull and Aucoin (1975) have suggested that some VA's with given structural characteristics and goals could be of benefit to older people, despite past evidence. In an attempt to examine this possibility, Cutler (1976) studied membership in different types of VA's and its

relationship to well-being. He found that membership in church-affiliated groups was the only significant predictor of psychological well-being, after health and SES were controlled. His findings support those of Edwards and Klemmack (1973). Cutler suggested that his findings could be indicative of the more general relationship between religiosity and well-being in old age, or, more importantly, could be due to the characteristics of church-affiliated groups, such as possibly greater age-homogeneity or greater member activity and involvement. In addition, Beal (1956) has reported the need for researchers to consider "dynamic" as well as "static" factors in participation research. Thus, we decided to examine some characteristics of VA's in our research.

One category of such characteristics could be called "structural," since it relates to the structure of groups. We felt that one structural characteristic in particular sounded promising. That was size of the group. Woods (1953) has stated that "probably the needs of most people are best served by a smaller club since they can make friends and even if their abilities are limited, they can be put into service" (p. 14). Indeed, Indik (1963, 1965) has verified that the larger an organization, the lower the attraction and the higher the individual absence and turnover. Similarly, Coyle (1930) and Kinney (1953) have found that, in general, as the size of the group decreases, the strength of the affectional ties between members increases; also, Dawe (1934) has found that as a group gets larger, the amount of participation (in this case, discussion) per person

decreases. Thus, we will predict that the smaller the VA, the more satisfied people will be with it. We will also predict that people who belong to smaller VA's will have higher psychological well-being.

Another dichotomy which we wanted to study more closely was age-graded versus non-age-graded VA's. Ward (1979) has suggested that:

Old age associations do offer the potential for self-expressive uses of time which are more directly related to the interests and needs of older people. . . . Social groups will be most effective when older people plan and control the activities themselves [Ward's italics]. (p. 444)

Indeed, Bortner (1966) has noted that:

With increasing age, habitual groups no longer serve habitual functions. Either the older person can no longer pay the increased costs to maintain behavioral control over an overmanned system or the system has itself become so overmanned that age grading and other task irrelevant criteria are used to measure adequacy. . . . There are, unfortunately, few situations available where the older person can achieve functional self identity or can adopt new reference groups. Socially, the lack of new groups has partially been met by the development of special facilities designed for the elderly. (pp. 105-106)

Similarly, Woods (1953) has maintained that age-related associations allow the person to move at a more manageable pace and allow folks with common memories to get together and, indeed, has reported that "a group of their own is often the only place where the aging man or woman can find full social expression and acceptance" (p. 2). Havighurst (1968) has noted that "people who have been active in social clubs and professional and civic organizations often find that they are relegated to positions of less importance than they have enjoyed during their middle years" (p. 69). For those people whose health forces less active participation, Gubrium

(1973) has noted that morale may be a problem because their activity resources may lead to a degree of activeness which is at variance with social expectations in non-age-graded clubs, leading to negative self-judgments; it is likely, though, that VA's for the elderly would expect a slower pace than those made up mainly of younger people. And as Gubrium has reported:

Given personal orientation to both individual and social contexts, it will be assumed further that elderly persons feel more satisfied with themselves (morale) and their living conditions (life satisfaction) when there is congruence between what is expected of them by others of reference and what they can expect from themselves. (p. 131)

Bengtson (1973) has suggested that groups should allow the elderly to do the planning and self-determination. Certainly, control by the elderly would be more possible in age-graded groups. In addition, Gubrium (1973) found that among the aged with age-homogenous membership, daily concerns were more extensively centered on the problems of old age, and members frequently talked about health and other problems of old age. Silverman, MacKenzie, Pettipas, and Wilson (1974) have offered evidence that widows are very effective (and probably the most effective) agents in helping other widows cope. Schachter's (1959) studies of affiliation indicate that people tend to want to be with those who are "in the same boat." In fact, anxiety reduction and symptom relief in therapy groups often seem to be due to the fact that the patient has a chance to compare experiences with people who have common problems (Butler, 1975; Dickoff & Lakin, 1964). In addition, most studies have concluded that friendships tend to

be age-graded. For example, Bultena and Wood (1968) found that, in an early retired male population, friendships took place primarily among persons of the same age. Bell (1957) found that most of the men belonging to formal groups that he studied had many of their close personal friends among the members of these groups--and, thus, age-graded group participation may provide the individual with close, intimate, and primary-type associations. Thus, ample evidence allows us to predict that people who belong to age-graded VA's will be more satisfied with those groups and will have higher psychological well-being.

Another breakdown which we will examine is "instrumental" versus "expressive." Edwards and Booth (1973), basing their distinction on a separation first made by Talcott Parsons, have divided VA's into expressive, instrumental, and instrumental-expressive groups. An expressive VA is one in which activities provide immediate gratification for the participants themselves; an instrumental VA is one in which activities are directed outside the group of participants, where participants derive gratification from the accomplishment of the goal; instrumental-expressive is, of course, a combination of the two. Crosbie (1975) has even suggested this distinction for motives. There seems to be agreement among researchers that expressive activities in and of themselves may not be of much help to older people--activities such as playing cards and so on. Indeed, Ward (1979) found that card players had lower overall well-being, even after health and SES were controlled. Kuypers and Bengtson (1973)

have stated: "The elderly are, so to speak, prisoners of their own valuing past, and are likely to view expressive and nonfunctional activities as the wider society does, i.e., self-indulgent, useless, and nonpurposeful" (p. 195). Indeed, Burnside (1973) has asked, "If lives are already meaningless (and the aged tell us this), then why do we reinforce it by activities that could seem demeaning to the aged individual?" (p. 98). Similarly, Selye (1974) has said, "For many older people . . . the most difficult aspect of retirement to bear is the feeling of being useless. It is not for themselves that they want to work; they realize only too well that the end is near and that they cannot take their earnings with them beyond the grave" (p. 86). In addition, Busse (1970) has reported that "experience has shown . . . that so-called hobbies are of little value to elderly people unless they result in something which is appreciated by others. A hobby which contributes nothing to others but merely occupies the time of an elderly person is an unsatisfactory defense against depressive episodes" (p. 88). Supporting this statement are Klein, LeShan, and Furman (1965) who reported that their club members "resented . . . having to become involved in activity for its own sake or in projects that did not come to a logical, well-ordered conclusion. This criticism was angrily expressed by a man whose pottery pieces had never been fired" (p. 55). On behalf of instrumental VA's, in an interview reported in Parade magazine, Grandma Moses was asked what message she had for older people that might help them "enjoy their remaining years more." She said, "They will be happier if they forget

about their age and think about helping others." Thus, we will predict that there will be a positive relationship between satisfaction and instrumentality, such that people in instrumental VA's will be more satisfied and have higher psychological well-being than people in VA's which are not instrumental.

In addition, we decided to consider the church-related group. Rose (1960) has stated that "for most individuals the voluntary association is a means of relating the individual to this world just as the church is a means of relating the individual to the other world" (p. 691). Thus, perhaps the church-related group allows a person to have the "best of both worlds." Cutler (1976) found, for example, that membership in church-related groups was related to psychological well-being, even after health and SES were controlled. Thus, we hoped to examine such groups more closely. In keeping with past research findings, we will predict that membership in church-related VA's leads to more satisfaction and to higher psychological well-being.

Goals of the Research

The overall goal of our research is to examine in a path analytic approach the relationship among variables related to VA's and to psychological well-being in order to explore some methodological and theoretical issues. As can be observed from our literature review, researchers began the study of the relationship between VA participation and psychological well-being by simply correlating the two variables. Streib (1956)

was one of the first researchers to recognize the value of simultaneously examining the effects of important causal variables on the dependent variable. Researchers then used this technique to examine the relationship between VA's and well-being, while controlling for other variables. As we have noted, though, these techniques are especially prone to problems of interpretation. Recently, then, Markides and Martin (1979) have proposed and demonstrated the use of path analysis for similar research. Thus, with our path analytic approach, we hope to obtain new insight into the problem. As Maddox (1970) has noted, persons engaged in a scientific enterprise can concern themselves with generalizations about the distribution of some characteristics within the population or may be interested in the relationship between or among variables and "practical considerations frequently make it necessary to choose one or the other type as an immediate goal" (p. 18). Thus, our immediate goal is the examination of the relationship among variables.

A number of researchers have expressed the importance of an experimental study of VA participation and psychological well-being in older persons (Blenkner, 1961; Bull & Aucoin, 1975; Burgess, 1954; Havighurst & Albrecht, 1953). Before such an experimental study should be attempted, however--especially since such research will be "not easy" (Blenkner, 1961)--one should have an idea about what factors contribute to and mediate any relationship between VA participation and psychological well-being. For example, given that each individual likely has a somewhat

different need pattern, should we randomly assign people to just any group, and if the results are not dramatic, discount VA membership as of little value? Given the myriad possibilities for types of VA's, and even then, given that every group is somewhat different since different people make up each group, in order to rule out VA's as of "little independent value," then we should examine all possibilities. However, if one can isolate variables or characteristics which are related to psychological well-being, then one has the potential technique of going about a feasible and meaningful causal study. Even if one were able to assess well-being before and after membership, as has been suggested by Bull and Aucoin (1975), then we would still not be much better off, since one would not be sure which factor(s) were causing the effects. For instance, earlier we cited a study done by Harris and Bodden (1978). Their research indicated that participation in formal activity did increase well-being. But, as we established, Harris and Bodden included a number of different types of activities--shows, games, sharing of items, and so on. We, then, have no idea what factor caused the increase in well-being. Of course, since their purpose was to establish the validity of activity per se over disengagement, then they were not concerned with the particular nature of the activity. As we have reported earlier, this approach is in keeping with the hypotheses of activity theory. However, we believe that the quality of activity is important. Thus, again we reiterate the importance of establishing what qualitative factors are related to well-being and to VA

satisfaction. This process can be accomplished through correlational techniques. For, as Campbell and Stanley (1963) have pointed out:

Correlation does not necessarily indicate causation, but a causal law of the type producing mean differences in experiments does imply correlation. In any experiment where X has increased O, a positive biserial correlation between presence-absence of X and either post-test scores or gain scores will be found. The absence of such a correlation can rule out many simple, general, causal hypotheses, hypotheses as to the main effects of X. In this sense, the relatively inexpensive correlational approach can provide a preliminary survey of hypotheses, and those which survive this can be checked out through the more expensive experimental manipulation. (p. 64)

As an example of this process, Campbell and Stanley reported that Morse and Reimer (1956) subsequently checked by experimentation a major hypothesis demonstrated correlationally by Katz, Maccoby, and Morse (1951). Thus, a further purpose of our study, then, is to provide a better foundation for future researchers interested in an experimental study of this problem.

In addition, Forcese and Richer (1973) have said that "science is cumulative and should be based upon continual replications of findings leading to refinements, adjustments, corrections, and ultimately the growth of a fund of information" (p. 24). We have reported a number of inconsistencies in past research. Another purpose of our study, then, is to examine the differences among measures used in previous studies in order to clarify past inconsistencies. For instance, Carp (1977) has criticized previous research for evaluating the clients and not the service. She has argued, for example, that one could expect a "friendly visiting program" to decrease loneliness, but could not reasonably fault this program for not

changing responses to such items on well-being scales such as "I do better work now than ever before." Therefore, she maintains that the use of broad morale measures "waters down" the impact of relevant items on test scores and also obscures program effects. This problem has likely come into play in research on the effects of VA participation. For instance, Ward (1979) used Wood, Wylie, and Sheafor's (1969) scale of well-being to determine independent effects of VA participation. Some of the items on this scale are: "As I look back on my life, I am fairly well satisfied," "When I think back over my life, I didn't get most of the important things I wanted," "I've gotten pretty much what I expected out of life," and "I have gotten more of the breaks in life than most of the people I know." Obviously, one cannot expect current VA participation to erase one's past or to change it in any way! Thus, we decided to consider this popular well-being scale with and without these relevant items to examine the effects.

In addition, Cutler (1976) has asserted that differences in the results of previous studies may stem from the variability in the measures used and in the samples. As he has noted, for example, three of the studies (Bull & Aucoin, 1975; Cutler, 1973; Edwards & Klemmack, 1973) employed selected items from Neugarten et al.'s (1961) scales of well-being, whereas one study (Graney, 1975) used a modified version of the Affect Balance Scale developed by Bradburn et al. (1965, 1969), and another used the Cantril (1965) satisfaction ladder (Palmore & Luikart, 1972). In this

study, then, we decided to employ three different scales of well-being-- Wood et al.'s (1969) revision of Neugarten et al.'s (1961) scale, the Cantril Ladder (Cantril, 1965), and Bradburn's (1969) Affect Balance Scale--on our sample, so we could ascertain the possibility of variability due to measurement inconsistencies in past studies..

CHAPTER II

METHOD

The Sample

We utilized purposive sampling in our study. As Simon (1969) has reported, the key to proper use of this nonrandom technique is to obtain as varied a collection of groups as possible. In order to attempt to reach this goal, VA's were initially identified through lists obtained from the Durham Chamber of Commerce and the Coordinating Council of Senior Citizens. From these lists, VA's of primarily white membership were selected with an eye toward obtaining a variety of types. However, in dealing with such real-life groups, certain constraints were placed upon us, since we were at the mercy of those in charge of the groups. Some presidents were reluctant to provide lists of members; this concern was especially expressed by a president who reported that many of the members had unlisted telephone numbers. In a couple of cases, presidents were willing to allow us to accept volunteers from their memberships, which we finally had to do, although we were somewhat hesitant to do so. In the final analysis, 50 VA members were interviewed. There were 26 males and 24 females. Seven different types of groups were obtained. We will report

on these groups in more detail later on in this chapter.

From lists of VA members and lists of volunteers, we drew names at random and attempted to contact these people by telephone. Appointments were made with those who agreed to be interviewed and directed personal interviews were conducted, usually in the respondents' homes. Of those who were not volunteers, three attempts were made to contact each person. Since no incentives (other than helping us out) could be offered, there was a 59% refusal rate. Of those who refused, 37% were simply "not interested," 33% reported that they were "too busy," and 30% reported that they were in "poor health."

As we reported earlier, membership in church itself was not counted as a VA, but membership in church groups such as the "Ladies' Church Circle" or the "United Presbyterian Old Timers" was. (These are fictitious names.) This practice is in keeping with that of Babchuk et al. (1979). We decided not to seek participation from Black organizations, so that race would not be a complicating factor in the analysis. Indications are that Black participants may differ in ways that we do not wish to examine at this point. For instance, Clemente, Rexroad, and Hirsch (1975) found that Blacks are disproportionately prone to high VA participation. However, we did not attempt to screen out Blacks from our analysis of predominately white groups, so two Blacks are included in our sample.

Maddox (1970) has reported that a number of studies of the non-institutionalized elderly have used random sampling. But, the non-

participation rates in such studies have usually been high, especially when clinical evaluation of subjects is involved. He has suggested, then, that "it is entirely possible that a high refusal rate in such instances produces a sample which is essentially the equivalent of a collection of volunteers" (p. 20). In a subsequent study in which volunteers in Duke's first longitudinal study were compared with samples of elderly persons used in other research projects, the results indicated that "the relatively high refusal rate among older persons asked to participate in surveys tends to make the participating respondents essentially the equivalent of volunteers" (p. 22). Nevertheless, we were originally hoping to make direct comparisons among members of target groups, but since some samples consisted of volunteers and others of persons sampled from membership lists, we were somewhat hesitant to do so. As Forcese and Richer (1973) have pointed out, "Research is . . . a compromise between what we would like to do and what we can do; it is, in essence, the art of the possible" (p. 257). Thus, as in any research, we will from time to time report accounts of hopes thwarted by the constraints of reality. At any rate, we feel it may be useful to report on the eight target VA's from which members were obtained. Information about the various VA's was obtained in a variety of ways, including interviews with VA presidents, attendance at meetings, and, of course, members' comments and information. We will now report on the VA's from which respondents came.

Target VA's

The first VA is a chapter of a national service organization. In 1976 this particular organization made aging its national program priority (Schwartz & Peterson, 1979). This particular chapter consists completely of retired men. Chapter size is 28; meeting attendance averages around 25. Meetings are held once a week, for around two hours. The first part of the meeting is set aside for a period of refreshments and socializing and the second half for a speaker, followed by a question-and-answer session with the speaker. Programs are not necessarily age-graded. This chapter maintains a good deal of self-governance, despite its national affiliation. For instance, the chapter rejected the traditional name usually given to chapters of senior members by the national organization in favor of a name of their own choosing. In addition, despite encouragement from the national headquarters for the group to increase its membership, the group states a preference for remaining small and makes little effort at present to recruit new members. This group was initiated by a member of the national organization who was dissatisfied with his age-integrated chapter. The group met for six months before acquiring enough members to be chartered by the national organization. Efforts were made to acquire other members from the local chapters, but these other members did not want to leave their long-standing fellow members. Nevertheless, approximately half of the members had been a member of another chapter of this particular service VA sometime and somewhere during their lives. Meetings are

less structured than those of other chapters--no singing at the beginning of the meetings and, in particular, no fund-raising activities such as pancake suppers. Members feel that they have "been through that all before" and, besides, feel that they contribute enough to service through their other personal activities. The group, though, does sponsor a child to Easter-Seal camp and also sponsors a chapter of the organization at the college level. Members invite potential members to the meetings. The president reported, though, that except for the meetings members "don't see another that often." Concern is with getting members who will participate regularly. The members tend to pride themselves on their chapter's good attendance. We attempted to contact 10 members of this group; nine interviews of members were conducted.

The second target VA was another local chapter of this same service organization, this one consisting of men of all different ages and following all the regular traditions. Five volunteers came from this group, after our appeal for respondents was announced during several of the meetings and appeared in the chapter's bulletin to all members.

The third target VA was a church-related group, headed by the associate pastor of the sponsoring church. The group has no formal officers per se, except for this pastor and several "consultants" from among the membership. Only about half of the older members of this church participate in this group and, of these, only five are male. Group size is around 100; average meeting size is around 75. Four meetings are

usually held each month. Two of these meetings are taken up with ceramics, one with Bible study, and one with various other activities such as shopping center visits and short trips to tourist places. The church provides van transportation for the members. This type group is common among the larger churches in the area. We attempted to contact 15 members of this group; 8 interviews were conducted. However, one member of another target group also belonged to this group, so 9 members of this group were represented.

The fourth target VA was a "Golden Age Club," sponsored by the local recreation department. This group meets twice a month, for two hours. Activities are varied--everything from crafts and bowling to speakers and trips. Dinners are also held at times. Trips can be overnight, such as to Hawaii or Florida, or one-day, such as to outlets or on fishing trips for the men. The president reports trying to have "something for everybody." Trips are made in conjunction with other Golden Age clubs in the area. The group puts out a little paper with announcements of activities of all the clubs. According to the director of the Durham recreation program, this particular VA is basically the same in composition and program as the other white Golden Age club in the area. (There are also two Black Golden Age clubs in the area.) The director also reports that, despite efforts at all types of programs, few lower and upper class members have been attracted. About 150 people belong to the group; about 75 attend an average meeting. We attempted to contact 25 members; 6

interviews were conducted--8, counting overlapping memberships.

The fifth VA was a men's fraternal organization consisting of about 425 members and with an attendance at meetings of about 40. About 10% of this group is over 65 years of age. The president reported that most of the older men do not attend the business meetings, but sometimes spend the day at the lodge, playing cards and socializing. The group sponsors a camp and scholarships, heads local youth programs, and helps needy families. As with most fraternal groups, this group has secret balloting, blackballing of potential members, and secret ceremonies. The president was willing to provide a list of 8 members over 65 years old. Three of these men agreed to be interviewed.

The sixth VA is a chapter of a national VA for women, best described under the "hobby or garden club" classification. This group sponsors many money-making projects, such as card sales, in order to make contributions to the Red Cross, the Salvation Army, and local needy families. The group meets once a month for three hours. The first part of the meeting is taken up with refreshments and socializing, followed by a business meeting and a program. Programs vary from gardening information and decorating tips to information on nutrition. Most programs are not age-related. The group meets in members' homes, with the hostess preparing the refreshments. This particular chapter is made up of older women, with around 75% being over age 65 and only one person (the current president) not yet retired. Members gain points through activities such as

crafts and projects (reported on during "Show and Tell" time at the meetings), visiting the sick, and so on, with national awards also possible for members. At one meeting, the president informed the group of a national drive to recruit new members, with recognition for the person and chapter who brings in the most new members. After this announcement, several members voiced concern that the group "could not meet in homes if it got too big." Most of the members had been friends with someone in the group before joining, but two members had read about the club in the paper and contacted the local council to find out the nearest chapter to where they lived. Chapter number of members is 16; average meeting size is 12. Eleven members were contacted and 7 interviews were conducted.

The seventh VA was a national service organization for women and men which is also somewhat church-related, a fact reflected in its name. The group sponsors a home for elderly women who do not want to be or cannot live alone. At least in the Durham area, this VA consists entirely of women. Membership policy is "like that of the church," but usually the potential member is invited by friends to join. The organization is divided into small groups or "circles." There are 12 such groups in Durham. Each circle is responsible for several of the ladies in the group-sponsored home and has projects to raise money to keep up the home and also visits there. Each group (circle) meets once a month in a member's home and once a month for a joint meeting of all the circles--which is held in the group home. This meeting consists of lunch and a program. This

particular circle consists of 18 members, of which about 12 attend an average meeting. All members of this circle were over 65 years of age. In fact, the president of this circle expressed concern that the members of her particular group "were getting too old" and that the group "needed new blood." Thirteen members of this group were contacted; seven interviews were conducted.

The eighth VA was a locally organized club for retired men begun by a public employee of the city of Durham who wanted to keep up with his work network after retirement. The group is strictly social in nature and has no service projects. Dues are freewill and are used, for instance, for an annual Christmas party to which the wives are invited. The group meets once a month for one hour. Members usually arrive a bit early for a period of socializing before the meetings begin. The meeting consists of a period of singing, prayer, business, and then a speaker, followed by a question-and-answer session. Afterwards, refreshments are served. Potential members are invited by friends. Membership consists of around 80 people; average attendance is around 40. Five volunteers came from this group, but with overlapping memberships, seven people are representatives of this particular VA.

In addition to membership in these VA's, respondents held memberships in a variety of VA's in the Durham area. At least 40 other local and national organizations have at least one representative in this sample. Table 1 shows the distribution of memberships in different types of groups for the 50 respondents.

Table 1

Distribution of Memberships in Types of Groups^a

Type of group	Number of memberships held
Local senior citizens	23
National senior citizens	7
Fraternal	14
Service	29
Veterans	1
Political	1
Hobby or garden	15
Fraternity or sorority	2
Farm	2
Literary, art, discussion, or study	1
Professional or academic	14
Church-affiliated	41
Youth	2
Other	<u>6</u>
Total	158

^aTypes of groups based on NORC classification of all memberships held by the 50 persons in the study (see Cutler, 1976).

Aided recall was used to obtain information on VA's (Babchuk & Booth, 1969). Respondents were shown a list of different types of organizations and asked which ones they belonged to. Babchuk and Booth (1969) were concerned about overexaggeration of membership and participation (e.g., see Hausknecht, 1962), so they only considered respondents to be affiliated with an organization if the respondents could state when they first became a member, could tell the purpose of the group, and could relate the extent of their commitment and involvement in the organization (e.g., frequency of attendance, committee memberships held, and whether or not they served as an officer). Since we asked these questions and more about each VA, we do not feel that respondents were able to exaggerate the number of VA's to which they belonged.

Table 2 gives information on the distribution of our sample on basic descriptive variables.

Some Sampling Concerns Related to SES

As Campbell et al. (1976) have pointed out, the main concern these days is not the economic needs of people, but rather the need for a large and more satisfying life experience. The thrust of VA's today is seen as not providing money and medical care but, instead, to take care of more emotional needs--for psychological well-being. We do not find it surprising that lower class people are not as "happy" or "satisfied" as upper class people (according to past research), because the measurement of class usually includes income, occupation, and education--on which life-style is

Table 2

Distribution of Sample on Descriptive Variables

Marital status distribution

<u>Marital status</u>	<u>Number of respondents</u>
Married and living with spouse	30
Married but spouse absent	1
Divorced or separated	1
Widowed	16
Never married	2

Work status distribution

<u>Work status</u>	<u>Number of respondents</u>
Employed full time	3
Employed part time	7
Retired	36
Never worked outside home	4

Health status distribution

<u>Health status</u>	<u>Number of respondents</u>
Excellent	15
Good	22
Fair	11
Poor	2

Income distribution

<u>Income bracket</u>	<u>Number of respondents</u>
\$25,000 or more	8
\$15,000-\$24,999	9
\$10,000-\$14,999	11
\$5,000-\$9,999	13
\$1,000-\$4,999	4
\$999 or less	0
Refused or don't know	5

Table 2 (continued)

Education distribution

<u>Grade completed</u>	<u>Number of respondents</u>
16-20	18
11-15	25
6-10	7
0-5	0

dependent. As we have noted, researchers in recent years have controlled for the effects of SES in examining the relationship between VA participation and well-being. Yet, as we have indicated, whether measured by education, income, occupation, subjective judgments by respondents, or by some combination of these indicators, social class is positively related to membership and participation (e.g., Agger, Goldrich, & Swanson, 1964; Babchuk & Booth, 1969; Beyer & Woods, 1963; Cutler, 1976; Scott, 1957). Evidence suggests that older lower class individuals also tend to be relatively inactive in VA's (Hausknecht, 1962; Tissue, 1971). As we have reported, though, past research has usually utilized measures of simple membership in VA's--and since upper and middle class people belong and participate more than lower class people, then we would expect that controlling for SES would have some impact. We originally hoped to see if lower class people were less satisfied with the VA's to which they belonged. However, in taking our sample from VA members, we succeeded in greatly reducing lower class people from consideration. We considered actively seeking such members, but feel that by doing so, we would only have unnecessarily complicated our analysis. Evidence does suggest that once lower class people do make the step in joining, they are as active and retain membership as much as the upper classes (Trela, 1976). But, Taietz (1976) found that the elderly whose life-style is one of organizational participation are more often members of a senior center than those who do not have this life-style. Thus, as we just noted, past studies have

concentrated on comparing scores of those who belong to VA's with those who do not. This technique opens the door to the possibility that there is a "self-selection" of healthy and already well-adjusted people into VA's (Cutler, 1973; Riley & Foner, 1968; Wilensky, 1961). Indeed, Woods (1953) has noted that:

To be sure, most [VA members] are socially minded to start with. One of the reasons why they seek out a club is that they like people and dislike being alone. Of course, whenever there are large groups of people there are a few "odd" ones, but it is amazing how few of these people appear. In general they are well-adjusted normal men and women. (pp. 15-16)

In addition, members seek out those who they believe, also, have personality traits and/or similar qualities which would make them desirable members (Edwards & Booth, 1973). By taking our sample from people who belong to VA's, we hoped to eliminate the "self-selection" problem or at least to lessen it to some extent. It is our contention that we will be able to examine the role between VA participation and psychological well-being in a more stringent way by this technique--since researchers have been concerned with finding the effects of VA participation over and above the effects of SES (i.e., Cutler, 1979), we will have a better view of this situation since we have a rather homogeneous SES sample. After all, a couple of studies have suggested that general activity has less relationship to well-being among higher SES groups (Bengtson, Chiriboga, & Keller, 1969; Kutner et al., 1956). Indeed, Lemon, Bengtson, and Peterson (1972), who attempted a verification of activity theory, suggested that perhaps the fact that their subjects were highly homogenous in social class prevented their

finding effects of simple activity. Thus, we will be able to test in a stronger way the importance of VA's. As Langner and Michael (1963) have noted:

Engaging in group activity is not just another index of social status; it may also have positive mental health implications at all SES levels. [But] . . . one must have some of the characteristics we already consider to be signs of mental health in order to participate in groups. (p. 294)

Thus, we believe that most of the members of our sample may be above average; however, we should be able to detect some differences between them in psychological well-being, if VA's are effective. For instance, we should be able to tell if being more active in VA's, is "better" than being less active, for our contention is that these people will generally be able to participate in many VA's, if they wish. At least one respondent reported, for instance, that she had been asked to join another VA besides the one she belonged to, but had not so far. Therefore, "self-selection" should be less of a problem, since all our respondents belong to at least one VA--and thus can be considered "joiners."

Analysis Procedures

We will be presenting two general path models which we examined in our research. The first model deals with the individual's participation in VA's; the second model deals with VA characteristics. We will present the analysis procedure for individual participation first.

Analysis of Individual Participation

We will now describe the variables we used in our path analysis of individual participation. Appendix A gives more details by presenting the interview schedule we used and, where appropriate, the coding techniques used.

The Variables

Health (HEALTH)

Subjects were asked, "Compared to others your age, would you say your health is: Excellent, Good, Fair, or Poor?" In essence, then, this measure is one of self-perceived health. Research has shown that self-perceived health is more related to psychological well-being than physician-assessed health (Larson, 1978), although the two ratings correlate rather highly (Maddox & Douglass, 1974).

Income (INCOME)

Subjects were asked, "In which range was your last year's (1979) income from all sources?" If subjects were currently married, then we asked for joint income. Five respondents either refused to tell (four people) or did not know (one person) their last year's income. Rather than lose these data, we plugged in the medians for the sample, taking into account respondents' sex and marital status. The medians were: 5 for married men, 4 for unmarried men, 4 for married women, and 3 for unmarried women.

Education (EDUC)

Subjects were asked, "What is the highest grade of regular school or college you ever attended?"

Social Desirability (SOCDES)

As we have reported earlier, we utilized items from the Marlowe-Crowne Social Desirability Scale (1964) to measure this variable.

Formal Activity

Chapin scale measure (CHAPIN). For one measure of VA participation, we decided to use the Chapin scale (Chapin, 1947). In this scale, weights are assigned to various degrees of participation as follows: membership = 1, attendance = 2, contribution = 3, committee membership = 4, and officer = 5. A person's total participation score is simply the sum of the weights for all organizations for which the person is affiliated. We felt that this measure captures the essence of involvement, without infringing on our qualitative measure of satisfaction with VA's. As Chapin (1947) noted, this scale describes respondents' "objective social condition."

Meetings measure (MEETINGS). For a second measure of formal-activity participation, we decided to examine the effects of the average number of meetings that the respondents attended each month. This measure was calculated by taking into account the average number of meetings that the respondents reported usually attending for each VA that the respondent belonged to.

Formal Activity Satisfaction

Total satisfaction measure (TOTSATIS). Campbell et al. (1976) have reported some problems with global questions as, "How satisfied are you with your living conditions?" as opposed to more specific questions about various aspects of living conditions, for instance. They themselves asked their respondents, "How much satisfaction do you get from the organizations you belong to?" Their respondents rated satisfaction on a 7-point scale ranging from "completely satisfied" to "completely dissatisfied." The choice of this format hinged on its relative simplicity and use of little interview time. They reported giving close consideration to the number of scale points to be used, since they did not want to impose more alternatives than could be meaningfully distinguished. We were particularly concerned with our measurement of satisfaction and decided to forego a global question due to the problems encountered by Campbell et al. Instead, we decided to ask respondents about each organization to which they belonged, using the technique of equal-appearing interval scaling developed by Thurstone (1959). This scale ranged from "0," which was "not at all," up to "4," which was "completely." We asked respondents to give us a number in response to the question, "In general, how satisfied are you with this group?" Respondents' total degree of satisfaction was the average of their responses for each group they belonged to. We felt that this averaging is consistent with the mental processing involved in determining one's overall satisfaction with groups. We considered this measure our "satisfied with" measure of satisfaction, or TOTSATIS.

Total wants measure (TOTWANTS). We also felt that we needed a somewhat more objective measure of satisfaction in order to examine the full impact of objective versus subjective measures. Kuhlen (1963) has asserted that "it may be hypothesized that satisfaction or dissatisfaction with an area of life is a function of the degree to which one finds satisfaction for major needs in that area of living" (p. 56). And, Zalegnik and Moment (1964) have defined satisfaction as "an individual's emotional measure of the balance he is experiencing between what he wants and what he is receiving from his environment" (p. 374). Similarly, Secord, Backman, and Slavitt (1976) have defined satisfaction as a "function of need gratification" (p. 252). As they have pointed out, individuals vary in their needs. For instance, Kaplan (1970) has said, "All older people are not alike. Their interests differ, their abilities vary, their attitudes are multiple, their needs are not simultaneous" (p. 327). In addition, Hartson (1911) has noted that "the same activity may satisfy different needs in different individuals or groups" (p. 403). The problem, of course, is determining what needs, then, each person has. Since the measurement of needs by personality instruments tends to be time-consuming and since one would have a difficult time determining objectively whether or not these needs are being met, we decided to use a method suggested by Ward (1979) in determining "need satisfaction." In this technique, respondents were asked to examine a list of "statements" originally reported by Havighurst (1957) as reasons why people join groups. They were then asked to "choose three statements from this list which best

describe what you want from this group." Then, for each statement given, they were asked, "To what extent are you able to _____ by being a member of this group?" Respondents were asked to choose "0" for "little," "1" for "some," and "2" for "much." Again, total satisfaction was determined by averaging these responses. Perhaps we should point out that Babchuk and Booth (1973), in a longitudinal study, found that under most circumstances members continued to retain the same reasons or rationale for participating that prompted them to affiliate initially. We consider this measure our "satisfied by" measure of satisfaction, or TOTWANTS.

One may very well ask, if we are interested in the effects of satisfaction with VA's on overall well-being, then why did we not simply ask, "How satisfied are you with the organizations you belong to?" and then, "How satisfied are you with your life?" or some such? We were disinclined to use this approach for several reasons. First of all, as we have reported, other researchers have run into problems in trying to use global questions (e.g., Campbell et al., 1976). And Lohmann (1977) found that a global well-being measure had the lowest correlations with other measures of well-being. One reason may be, of course, that the more items a scale has, the more reliable it is. Secondly, we felt that two such global measures as psychological well-being and VA satisfaction would be more prone to the effects of social desirability and "glossing over"; if respondents are in an acquiescent response set or prefer points at one end of a scale and so on, then the correlation may be overinflated. We wished to avoid this

possibility as much as possible. Thirdly, we felt that the measures we chose are representative of past research, allowing for some continuity and comparison, yet corrected for some past problems. Thus, this approach allowed us to examine some methodological issues related to psychological well-being measures.

Psychological Well-Being

As we reported earlier, we utilized three different measures of well-being: Wood et al.'s (1969) scale, the Cantril Ladder (Cantril, 1965), and Bradburn's (1969) happiness scale. We will now describe these measures.

Wood, Wylie, and Sheafor's (1969) scale (WOODLS). Wood et al.'s Life Satisfaction Index Z is a direct descendant of the LSIA scale originally developed by Neugarten et al. (1961). This original scale was revised by Adams (1969), who suggested that two items be dropped. Wood et al. (1969) incorporated Adams' modifications and shortened the scale to make it more amenable for research. They validated this "new" scale against the original scale, which had been validated against the judgments of a clinical psychologist. These scales were originally meant for questionnaire implementation, but since we conducted personal interviews, respondents were asked to answer "true" or "false," leaving out the original categories of "?" and "no response." In addition, we added "or woman" to the "alienation" item "Despite what people say, the lot of the average man or woman is getting worse, not better," since Adams (1969) reported that respondents seemed to be confused by this item and often wanted to

view "man" as meaning strictly males. On this scale, we coded the "right" answers (those meaning greater satisfaction) as "1" and the "wrong" answers as "0."

Revised Wood et al.'s scale (RWOODLS). As we reported, we also examined Wood et al.'s (1969) scale without the items which referred to past instead of present life. The items which were deleted can be determined from Appendix A. We, of course, expect that this revised scale will allow us to examine the effects of current VA participation in a clearer light.

Bradburn's (1969) Affect Balance Scale (BRADHAP). Bradburn (1969) has asserted that one's sense of well-being results from the relative balance of positive over negative feelings, rather than simply resulting from positive feelings. With his scale, four items tap feelings of negative affect and four tap feelings of positive affect. A factor analysis by Bradburn and Caplovitz (1965) indicated that these eight items did form two separate positive and negative clusters. The phrasing of these affect items is not event specific, although a time referent of the past week is given. Bradburn felt that it did not really matter which events in particular brought about the positive or negative feelings, but he did give a time focus, since affect is likely to change over time as environmental forces change, along with the change in the content of one's experience and accomplishments. A validity study of the Affect Balance Scale has confirmed its usefulness for applications with older people (Moriwaki, 1974). Responses were

coded "0," "1," or "2" according to whether the person indicated he had had these feelings "not at all," "once," or "several times." Scores were calculated by taking the total number of the positive affect items and subtracting from them the total number of the negative affect items. In addition, 11 points were added to each score in order to insure a positive number.

Cantril Ladder (CANTRIL). The Cantril Ladder, developed by Cantril (1965), certainly has face validity, although we have not seen scientific evidence of other kinds of validity. In this technique, the respondent is first asked to describe his/her "wishes and hopes for the future" and then to describe "what would be the most unhappy life" for him or her. She or he is then shown a picture of a ladder, which has rungs numbered from "0" on the bottom rung to "9" on the top rung. The respondent is asked to suppose that the top rung represents "the best possible life for you" and that the bottom rung represents the "worst possible life for you" and then is asked to indicate where on the ladder (interviewer moves finger up and down the ladder) she or he feels she or he "stands at the present time." This measure is "self-anchoring," since respondents are able to evaluate satisfaction in their own terms. Also, the measure results in a theoretically equal-interval scale. The Cantril Ladder has been used not only with all ages but also in a variety of countries.

Alternative Measurement Approach

We were somewhat concerned that our method of measuring VA

satisfaction could possibly create problems, since we equated each VA by our method of averaging. Therefore, we decided to examine an alternative measurement approach.

Formal Activity (ACTIVE)

With this measure of formal activity, we determined the one VA that the respondent was most active in, as measured by the Chapin scale. If the respondent had the same score on two VA's, then we determined the one VA that she or he was most active in by an examination of measures such as the percentage of meetings attended.

VA Satisfaction (ACSATIS)

In order to measure satisfaction, we took the VA the respondent was most active in (as measured by the Chapin scale) and determined the respondent's satisfaction with that individual VA.

Of course, measurement of the exogenous variables and of psychological well-being remained the same.

Table 3 presents the ranges, means, standard deviations, and scoring key of the major variables used in this analysis of individual participation.

The Model of Individual Participation

Figure 1 presents the path model of the relationship of individual VA participation to psychological well-being which we considered in our research. As can be seen from Figure 1, the model we proposed is

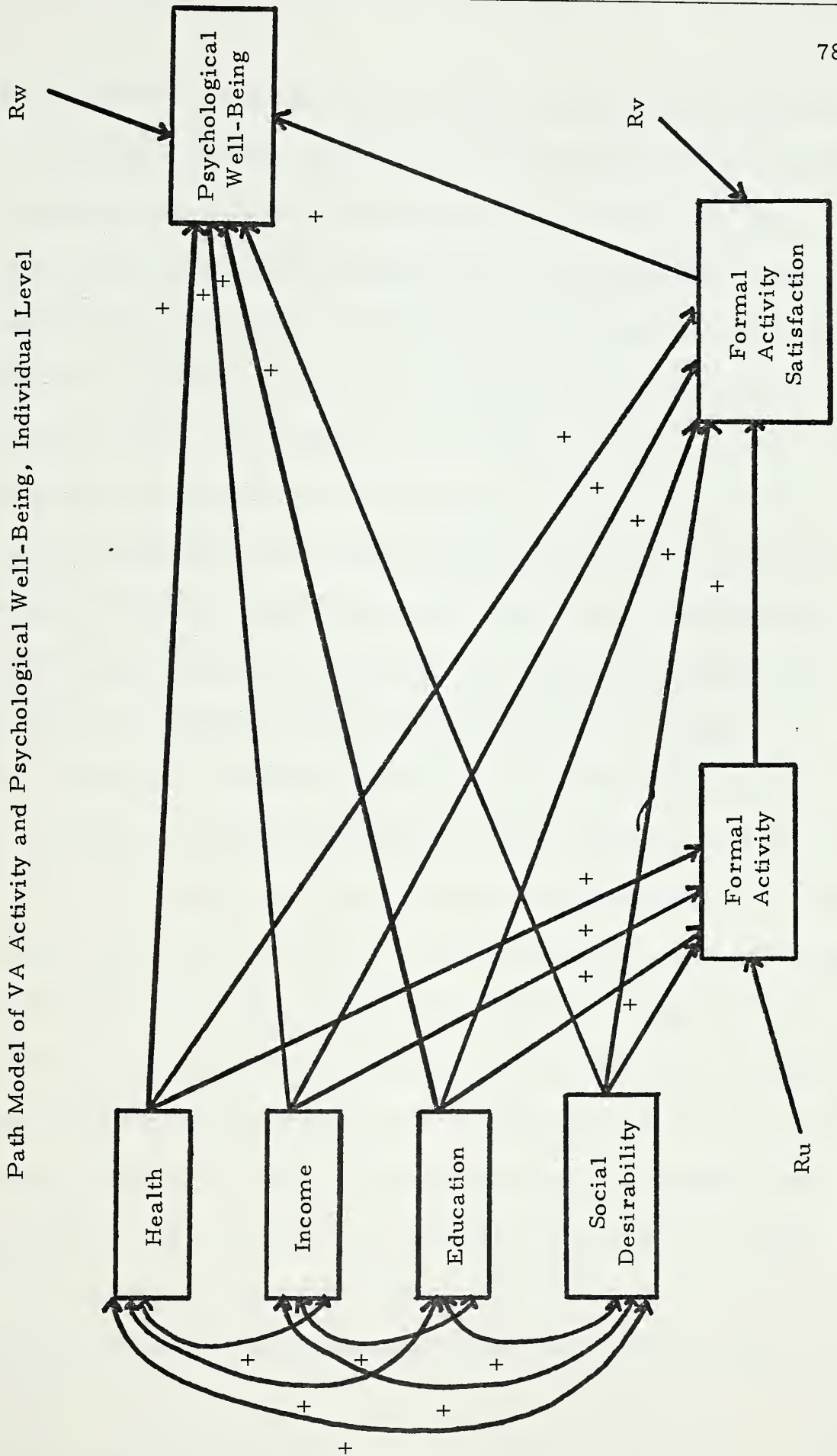
Table 3

Ranges, Means, Standard Deviations, and Scoring
Key of Major Variables

Variables	Potential range	Observed range	Mean	Standard deviation	Scoring key
AGE	NA	61-90	71.7	6.707	# of years at last birthday
INCOME	0-5	1-5	4.1	1.228	Hi = greater income
EDUC	NA	6-19	13.3	2.985	# of years of school attended
HEALTH	0-3	0-3	2.0	.833	Hi = better health
SOCDES	0-10	3-9	6.4	1.626	Hi = more socially desir- able responses
TOTSATIS	0-4	2-4	3.4	.635	Hi = more satisfaction
MEETINGS	0- α	0-16	5.6	3.169	Hi = more meetings
TOTWANTS	0-2	0-2	1.4	.322	Hi = more satisfaction
CHAPIN	1- α	1-66	22.9	13.310	Hi = greater activity
ACTIVE	1-15	1-15	8.8	13.469	Hi = greater activity
ACSATIS	0-4	2-4	3.6	.642	Hi = more satisfaction
BRADHAP	0-21	5-21	15.7	3.835	Hi = more happiness
CANTRIL	0-9	1-9	7.1	1.828	Hi = more life satisfaction
WOODLS	0-13	4-13	10.0	1.969	Hi = more life satisfaction
RWOODLS	0-9	2-9	6.8	1.666	Hi = more life satisfaction

Figure 1

Path Model of VA Activity and Psychological Well-Being, Individual Level



recursive, which means that it does not predict "instantaneous reciprocal action of variables" (Duncan, 1966). Thus, we assumed that formal activity (VA participation) is dependent on health, income, education, and affected by social-desirability tendencies but is not a determinant of them. Our hypothesized causal effect of health on formal activity could be somewhat difficult to deal with, however, since health may be influenced by one's level of activity. Nevertheless, we feel that a stronger case for our causal ordering can be made than for the other case and, thus, prefer in our cross-sectional approach to examine only effects in this one direction (cf. Markides & Martin, 1979). We can now examine the causal ordering and predicted signs of the path coefficients. For reasons of convenience, we will dissect the model one dependent variable at a time. The four exogenous variables are health (HEALTH), income (INCOME), education (EDUC), and social desirability (SOCDES). These variables are taken as given and their antecedents are left unspecified and unanalyzed. As for the relationship among these variables, we would expect that people with higher income and higher education would be able to afford better medical care and to maintain a more health-preserving life-style--therefore, we expect a positive correlation between health and education and a positive relationship between health and income. We would also expect people with more education to have higher incomes, and, therefore, we predict a positive relationship between income and education. We are less certain of the sign of the path coefficient between education and social desirability;

however, we will predict a positive correlation--that people of higher education will be more inclined to try to appear "respectable and well-adjusted," since they may have fewer obvious adverse living conditions which could easily explain "negative" feelings and low levels of activity. For this same reason, we will also predict a positive correlation between income and social desirability and between social desirability and health.

The first dependent variable within our model is formal activity. Health, income, education, and social desirability are its antecedents. Since people with better health should be able to participate more in VA's, we will predict a positive correlation between health and formal activity. Other studies have shown positive relationships between formal activity and health, as well as between formal activity and income and education (see Ward, 1979). Thus, we will predict positive path coefficients between formal activity and health, income, and education. Since some researchers have suggested a norm of social participation (e.g., Hausknecht, 1962), we will predict a positive relationship between social desirability and formal activity, such that people may exaggerate their reported degree of participation. (However, as we noted, we attempted to lessen this problem by our interviewing tactics.)

The next dependent variable is formal activity satisfaction. We will predict that those in better health will be able to participate and enjoy their participation more, and, therefore, we will predict a positive correlation between health and formal activity satisfaction. People of higher income

and also of higher education may be able to influence activity and be in "more satisfying" positions in VA's--therefore, we predict positive path coefficients between income and formal activity satisfaction and between education and formal activity satisfaction. We also predict that people who are high in social-desirability tendencies will be more likely to say that they are satisfied with their formal activity participation. We will also predict a positive relationship between formal activity and formal activity satisfaction, such that people who participate more will obtain more satisfaction.

Our final dependent variable is psychological well-being. Previous researchers have found positive relationships between health, income, education, and psychological well-being (see Larson, 1978). Therefore, we will predict these relationships to be positive. Also, we will predict a positive relationship between social desirability and psychological well-being, since those people with higher social-desirability tendencies will likely give "good" responses to items on the well-being scales. In keeping with activity theory, we will predict a positive path coefficient between formal activity and psychological well-being. Finally, we will predict a positive relationship between formal activity satisfaction and psychological well-being, in keeping with the framework we have outlined previously.

We were particularly interested in the decomposition technique (e.g., Alwin & Hauser, 1975) in examining this model; i.e., we wished to see to what extent health, income, social desirability, and educational effects on

psychological well-being are mediated by formal activity and by formal activity satisfaction as opposed to being direct. This technique will allow us to examine in more detail the activity theory perspective of the relationship between VA participation and psychological well-being versus our modified activity theory which purports that quality must be taken into account. In this way, we hope to gain insight into past research problems.

There are five basic components in the Alwin and Hauser technique of decomposition: total association, total effect, direct effects, indirect effects, and spurious or noncausal effects. The total association between two variables is simply the value of their zero-order correlation coefficient. The total effect of a variable consists of the standardized coefficient of that variable when it is entered net of all the other variables in the model which have been posited as prior or simultaneous to it. The direct effect of the variable is the impact of that variable net of all other variables in the model. The indirect effects are the differences between the total effect and the direct effect, parceled out and assigned to other variables in the model. Therefore, the total effect equals the sum of direct effects and the indirect effects via all other appropriate variables. The spurious effects are those effects due to causally prior variables and equal the difference between the total association (zero-order correlation) and the total effect. Therefore, the total association equals the sum of the direct effects, indirect effects, and the spurious effects. The Alwin-Hauser technique has two primary advantages over the procedure outlined and presented by

Duncan (1966). First of all, it is much simpler to calculate. Also, it more effectively decomposes the zero-order correlation. The indirect effects that Duncan discusses include both the indirect effects and the spurious effects in the Alwin-Hauser approach. However, the Alwin-Hauser approach is not inimical to the basic path-analytic model presented by Duncan but simply makes finer distinctions in the decomposition of effects. Thus, in presenting the results of our path analysis, we will first present the coefficients in table form and, when useful, present the decomposition of effects.

Relationships Among VA Satisfaction Measures

As we noted, we utilized two different measures of satisfaction with VA's--viz., TOTSATIS and TOTWANTS. TOTSATIS is a single question concerning how satisfied the respondent is with a VA. TOTWANTS is the calculation of the extent that respondents felt that their wants from VA's were being met. Initially, we debated whether we should ask, "How happy are you with this group?" as opposed to "How satisfied are you with this group?" or perhaps both. Campbell et al. (1976) have stated that "happiness" has been used as a synonym for "satisfaction" and that empirically the two terms overlap, but actually these measures do not always behave in the same way. These researchers say that "happiness" seems to evoke chiefly an absolute emotional state, whereas "satisfaction" implies a more cognitive judgment of a current situation. They note, however, that as they in their own research moved to less abstract assessments, the

concept of "happiness" became increasingly awkward, whereas the concept of satisfaction became more natural--such as, they felt it sounded better to ask how "satisfied" one was with how one's house heats in the winter as opposed to how "happy" one was with that situation. We debated whether we should ask about satisfaction or happiness with VA's, then. After due consideration, we decided that the two questions would be construed synonymously and opted for the "satisfied" one (TOTSATIS), in keeping with the concept of life satisfaction. Similarly, our second measure of VA satisfaction, the satisfied by (TOTWANTS) measure, is in keeping with the concept of satisfaction.

As for the relationship between these measures of VA satisfaction and the measures of psychological well-being, we offer the following predictions:

Agreement seems to be that the Cantril Ladder is a more cognitive measure, appearing to depend more on a basically intellectual process than other measures (Campbell, 1976; Campbell et al., 1976). Thus we would suspect that our TOTWANTS measure--the congruence between wants and satisfaction of those wants--would be related more strongly (positively) to the Cantril Ladder than to the more affective Bradburn "happiness" scale (cf. Campbell et al., 1976). The Bradburn scale, we suspect, will be more positively related to our TOTSATIS measure, since these both seem to be more affective in nature. In addition, since TOTSATIS and TOTWANTS measure more current satisfaction with VA activity, we will predict that

these measures will be more related to RWOODLS than to WOODLS.

Relationships Among Psychological Well-Being Measures

As Larson (1978) has noted:

A great deal of research has been done over the past 30 years on the life satisfaction, morale, and contentment of people over 60. These numerous studies are unified by their parallel objective of assessing the general affective experience of older persons in terms of a positive-negative continuum. (p. 109)

As Larson also noted, and as is evident from even superficial examination of the literature, a variety of approaches to measuring psychological well-being have been taken. Evidence suggests, though, that these measures do share some "core" that can be called psychological well-being, as evident in the usual high intercorrelations which have been found between scales (Larson, 1978; Lohmann, 1977). For instance, Bild and Havighurst (1976) found a correlation of .66 between Bradburn's (1969) Affect Balance Scale and the LSIA (Neugarten et al., 1961). Further, as Larson (1978) has shown, different measures have very similar relationships to other variables, and "empirically, the similarities between measures appear to be of more significance than the differences" (p. 110). Nevertheless, an examination of the content of specific well-being measures reveals that some define a multidimensional construct (e.g., the LSIA and the Affect Balance Scale), while others define a unidimensional construct (e.g., the Cantril Ladder). Also, measures differ on the length of time the respondent is assessing and the degree to which their evaluations are based on

comparison to others, one's past experience, or one's conception of how things might be (Larson, 1978).

As we have reported earlier, research on the relationship between VA's and psychological well-being has utilized a variety of measures--and inconsistent results have led at least one researcher to suggest that the differential findings could be due to variability in the measures used (Cutler, 1976). As we have noted, one purpose of our research is to examine this possibility. We have chosen three popular measures of well-being to study. As we have just noted, Wood et al.'s (1969) scale and Bradburn's (1969) scale are multidimensional, whereas the Cantril Ladder (1965) is unidimensional. In addition, the Affect Balance Scale assesses respondents' experience of affective states "during the past few weeks," whereas the Cantril Ladder asks respondents to rate their current life in relation to their best and worst imaginable life, and Wood et al.'s scale asks respondents to reflect on both their past and their present life. As we have reported, though, we decided to look at Wood et al.'s scale with and without the items on past life. We would expect that measures related to current life would correlate more highly with current VA satisfaction and with current VA activity than measures related to past life.

We will now present the analysis procedure for VA characteristics.

Analysis of VA Characteristics

Before presenting the model for this analysis, we will describe the variables we used in our path diagram of VA characteristics.

The Variables Related to Characteristics

Size of the VA (SIZE)

In order to measure size, we asked respondents how many members the groups had. Although this method is not as accurate as, say, averaging the number of people at meetings over the period of a year or determining the number of members from the roster belonging to the VA secretary, we believe that this method is adequately accurate. We found that completely accurate membership lists are difficult to obtain; often, for instance, the VA president had to go over lists to examine them for known deceased members when we asked for accurate lists. Size was coded directly.

Age-Graded VA's (AGEGRAD)

We considered a VA to be age-graded if the members reported that the VA consisted of older people only rather than people "of all ages"-- whether or not the VA was originally restricted to older people. We should note in several cases, though, that youngest members of age-graded VA's were 50 years old. Age-graded VA's were coded "1," non-age-graded "0."

Church-Related VA's (CHURCH)

We considered a VA to be church-related if it was sponsored by a church. Such VA's were groups as the Methodist Men and missionary circles. We did not count Sunday-school classes and church membership itself as VA's. Church-related VA's were coded "1," non-church-related "0."

Instrumental/Expressive VA's (EXPIN)

We utilized the criteria established by Jacoby and Babchuk (1963) in characterizing VA's as primarily expressive (coded "0"), both instrumental and expressive (coded "1"), and primarily instrumental (coded "2").

We had originally planned to utilize items from the Group Dimensions Description Questionnaire (see Pheysey & Payne, 1970) to measure these variables. However, respondents found these items to be difficult and time-consuming. Since subsequent analysis of the first few respondents' scores on these items revealed no unexpected findings from those determined by us from observation, we decided to measure these variables from our own and respondents' general observations.

The Other Variables

Measurement of exogenous variables (HEALTH, INCOME, EDUC, and SOCDES) remained the same as in the model presented in Figure 1.

Activity in Individual VA's (SCHAPIN)

The measurement in individual VA's of the respondents' activity was the respondents' CHAPIN score for each VA they belonged to.

Satisfaction with Individual VA's (SISATIS)

The measurement of satisfaction with individual VA's was the respondents' reported "satisfied with" value for each VA that they belonged to.

Psychological Well-Being

Psychological well-being was measured by Bradburn's (1969) scale

(BRADHAP). This measure was chosen, along with the CHAPIN and "satisfied with" measures, since analysis of our first model revealed that these measures predicted the most variance.

The Model of VA Characteristics

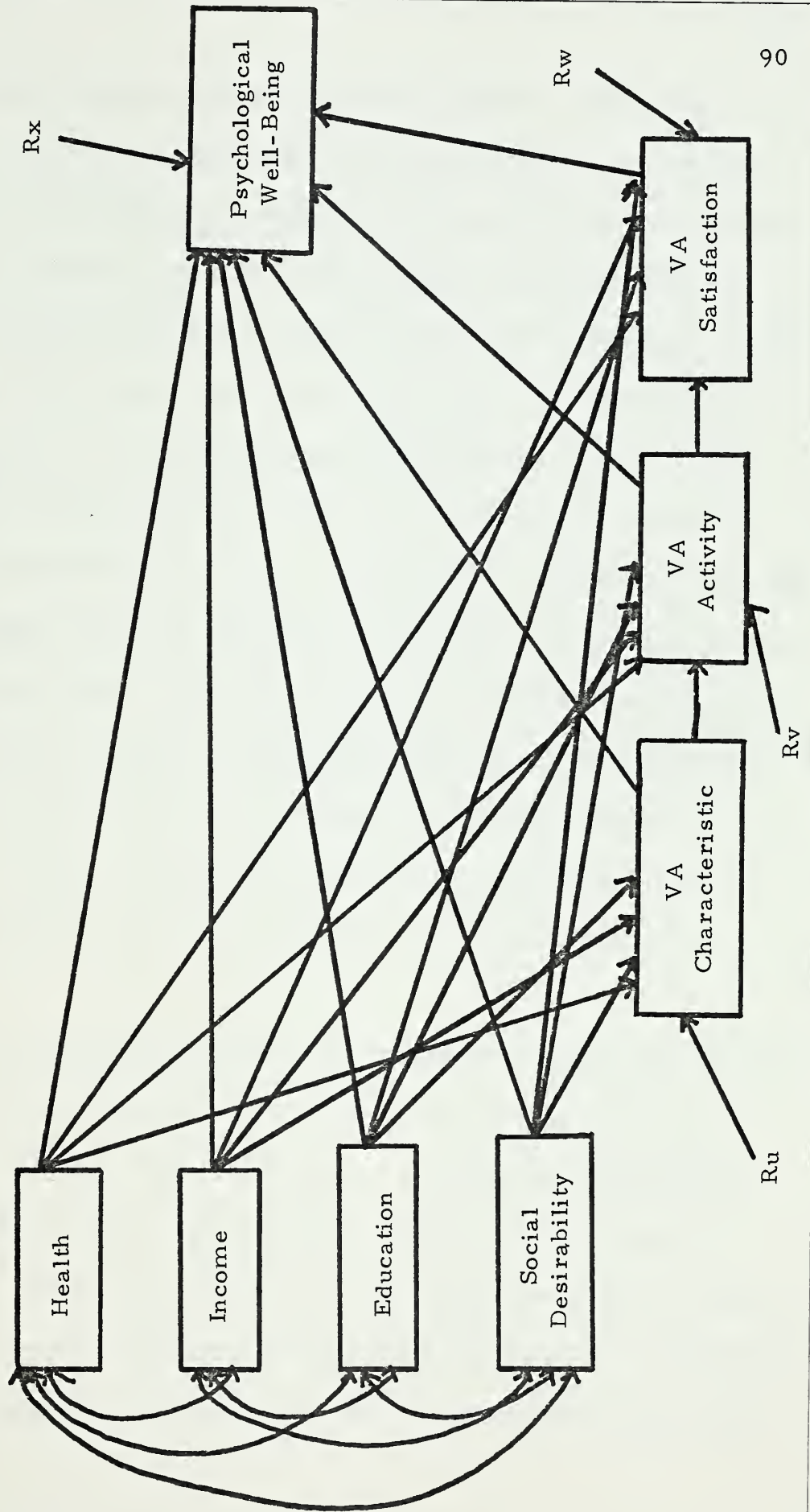
Figure 2 presents the general path model that we will be examining in our study of the relationship of VA characteristics to VA satisfaction, VA activity, and psychological well-being. This model differs from the model we proposed for the overall relationship between formal VA activity, total VA satisfaction, and psychological well-being (Figure 1) in two respects. First of all, we have added the VA characteristic as a mediating variable between the exogenous variables and our VA activity variable. Secondly, and most importantly, this model's unit of analysis is the individual VA, whereas Figure 1's unit was the individual person. Therefore, instead of being concerned with the effects of health, income, education, and social desirability on the individual's overall amount and degree of formal activity and on his/her total amount of satisfaction, we are now concerned with the effects of these exogenous variables on entrance into VA's with certain characteristics, on activity in these VA's, and on satisfaction with these VA's. We will examine our models with the particular VA characteristic one at a time, stating our predictions concerning the sign of each path. We will begin with the model concerning SIZE.

The Size Model

Since we have the same exogenous variables as in our first model,

Figure 2

Path Model of VA Characteristics, VA Satisfaction, and Psychological Well-Being



we will obviously keep the same predictions as before. That is, we hypothesize positive relationships between these variables. As for the relationships of the exogenous variables to entrance into VA's of different sizes, we do not expect very strong relationships. However, we will hypothesize that persons of better health will more likely belong to smaller groups, since these groups more likely require more individual activity than larger groups. We will hypothesize that persons of higher income will more likely belong to smaller VA's, since these groups are more likely to be formed through personal contacts (e.g., see Jacoby, 1966) and people with higher income probably lead life-styles which bring them into contact with more people. We will also predict the same relationship for education and SIZE. As for the relationship between social desirability and SIZE, we will predict that people with high social desirability may tend to exaggerate the number of people in the group or be attracted to larger groups which they think have more prestige than smaller, less known groups.

As for the relationships between the exogenous variables and psychological well-being, we will hypothesize the same relationships as previously--that is, positive path coefficients. We will also hypothesize the same relationships between the exogenous variables and participation in individual VA's (SCHAPIN) and individual VA satisfaction (SISATIS)--again, all positive. For the relationship between SIZE and VA activity (SCHAPIN), we will hypothesize that smaller groups will require greater participation

from individual members. We will hypothesize a positive relationship, as we stated previously, between VA activity and VA satisfaction. Finally, we will hypothesize negative relationships between SIZE and VA satisfaction and SIZE and psychological well-being. We stated the reasons for these hypotheses in Chapter I.

The Age-Graded Model

The predictions for the relationships between the exogenous variables, between the exogenous variables and SCHAPIN, between the exogenous variables and SISATIS, and between the exogenous variables and psychological well-being will remain the same. As for the relationships between the exogenous variables and entrance into age-graded versus non-age-graded VA's, again we do not expect the relationships to be strong (however, we believe these relationships will be stronger than in the SIZE model). We will hypothesize that people with better health will more likely participate in non-age-graded VA's--a negative relationship--since these people will be more able to "keep up with" younger people and will tend to maintain their past associations as long as they have their health. As for income and education, Trela (1976) found that people of higher social class were more likely to join VA's exclusively for older people; therefore, we will hypothesize a positive relationship between age-gradedness and INCOME and EDUC. We will hypothesize a negative relationship between SOCDES and age-gradedness, however, since people may hesitate to say that they belong to an age-graded VA.

As for the relationship between AGEGRAD and SCHAPIN, we will hypothesize that people in non-age-graded VA's will be less active than people in age-graded VA's since they may be "shunted aside" by younger members (Ward, 1979). Finally, we will hypothesize positive relationships between AGEGRAD and SISATIS and BRADHAP for the reasons we gave in Chapter I.

The Church-Related Model

Again, the relationships concerning the exogenous variables and variables other than CHURCH will remain the same as we predicted. As for the relationships between the exogenous variables and CHURCH, we will hypothesize that people of poorer health may turn to church-related groups (and to the church in general). We will also hypothesize that people of higher income and higher education will be less likely to participate in church-related VA's, since they may be likely to shun traditional religion in general. As for SOCDES, we hypothesize that people will claim more activity in church-related VA's. We will hypothesize in addition that people in church-related VA's will be more satisfied with those VA's, more active in them, and will have higher psychological well-being (as Cutler, 1976, found).

The Instrumental/Expressive Model

Since the predictions related to the exogenous variables remain the same, we will first describe the relationships among the exogenous

variables and EXPIN. We will hypothesize that those in better health will more likely participate in instrumental VA's, since these groups probably require more active participation--therefore, we hypothesize a positive relationship. We will also hypothesize that those of higher income and higher education will more likely participate in instrumental groups (see Jacoby, 1966). We will hypothesize, in addition, that people will tend to claim participation in more instrumental VA's; therefore, we will hypothesize a positive relationship between SOCDES and EXPIN.

As for the relationship between EXPIN and SCHAPIN, we will hypothesize that people will be more active in instrumental VA's. We will also hypothesize positive relationships between EXPIN and SISATIS and EXPIN and BRADHAP, for the reasons we stated in Chapter I. Table 2 in Appendix B presents the ranges, means, standard deviations, and scoring key for variables in this part of the analysis.

A Check on Our Analysis

In changing the focus of our analysis from the individual level to the VA level, we found it necessary to overrepresent respondents who belonged to more VA's on the exogenous variables and on our psychological well-being measure, since these variables can only be measured at the individual level. In order to assess the effect of this overrepresentation on the results of our analysis, we decided to rerun the model with BRADHAP, CHAPIN, and TOTSATIS variables--only this time using SCHAPIN and

SISATIS. The comparison of these results with Table 16 (p. 113) allows us to assess the differences and to report on distortions which result.

We will now present the results of our path analytic approach, beginning first with the results of the individual-level analysis.

CHAPTER III

RESULTS

Results of the Individual Analyses

In order to simplify the presentation of our results as much as possible, we will deal first with our overall path model and the relationships of health, income, education, and social desirability to VA activity, VA satisfaction, and psychological well-being; of VA activity to VA satisfaction; of VA activity to psychological well-being; and of VA satisfaction to psychological well-being. Then, in the next section we will report on our findings in relation to the VA characteristics--viz., size (SIZE), age-gradedness (AGEGRAD), church-relatedness (CHURCH), and instrumental-expressiveness (EXPIN).

Results of the First Measurement Approach

We will be examining two different measures of VA activity, two different measures of VA satisfaction, and four different measures of psychological well-being. Thus, we ran the model 16 times in order to assess the differential effects of these various measures. In addition, of course, we will be examining how well the model works. We will first see

whether the variables act as we would expect--whether the magnitudes of the path coefficients indicate that the variables are worth keeping in the model. Also, where we believe it will be beneficial, we will utilize Alwin and Hauser's (1975) decomposition of effects to assess the degree to which direct and indirect effects are operating.

All path analysis applications will be presented in tabular form. The tables present the standardized and unstandardized coefficients in the structural equations. Tables 4 through 19 present this information. Given the large number of correlations (240), we would expect that by chance alone (at .05 level) about 22 correlations would appear to be significant and some of these would appear significant in the not expected direction. In fact, though, the only significant path in which the sign is different from that expected is the path between CHAPIN and TOTSATIS.

Next we will examine the magnitudes of the path coefficients in order to assess the relative importance of particular predictors and to see whether the variables make useful contributions to the model. The path coefficients are simply standardized coefficients--therefore, they are metric-free. The standardized coefficients are thus the appropriate values to examine in order to assess the relative importance of the various predictors. In terms of predicting a certain respondent's degree of psychological well-being, the standardized coefficients should be interpreted as the increment in psychological well-being in standard deviation units for an increment of one standard deviation in that predictor variable.

In terms of the relative importance of variables to the model, we will necessarily have to keep in mind the various measures we used for each variable. Tables 4 through 7 present the coefficients for the measures of MEETINGS and TOTWANTS, with our measures of psychological well-being. For the predictors of MEETINGS (the average number of meetings attended per month), income, education, and social desirability, in that order, have moderate, albeit insignificant, impact. Health has relatively little impact. As for the measures of VA satisfaction, the predictors of TOTWANTS are indeed weak. Health, income, and MEETINGS have practically zero influence, and EDUC (path coefficient = $-.086$) and SOCDES (path coefficient = $.053$) are not much better. Since we are particularly concerned with the predictors of psychological well-being, we will examine these more closely. For the predictors of BRADHAP (Table 4), health has the most impact ($.357$), followed by SOCDES ($.299$). Income has the next largest effect ($.272$), although this path is not significant. MEETINGS has a moderate insignificant impact, followed by EDUC. Finally, TOTWANTS has almost no impact on BRADHAP. For the predictors of WOODLS (Table 5), income has the largest effect (path coefficient = $.329$). This predictor is followed by health, which has a path coefficient of $.236$. SOCDES is the next largest predictor. TOTWANTS, EDUC, and MEETINGS, in that order, have little impact. As for the predictors of RWOODLS (Table 6), we note that none of our variables make significant predictors. Income is the best predictor ($.266$), followed

Table 4

Coefficients in Structural Equations for Model with BRADHAP, MEETINGS,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²	
	HEALTH	INCOME	Independent variables		MEETINGS		TOTWANTS
			EDUC	SOCDES			
MEETINGS	.059	.299	.270	.165		.24223	
TOTWANTS	-.027	-.030	-.086	.053	.035	.01436	
BRADHAP	.357*	.272	-.103	.299*	.193	.30616	
						<u>Constant</u>	
MEETINGS	.226	.773	.286	.322		-3.82865	
TOTWANTS	-.010	-.008	-.009	.010	.003	1.50443	
BRADHAP	1.634	.849	-.133	.706	.233	4.58484	

*Significant at .05 level or beyond, using F tests.

Table 5

Coefficients in Structural Equations for Model with WOODLS, MEETINGS,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES		
MEETINGS	.059	.299	.270	.165		.24223
TOTWANTS	-.027	-.030	-.086	.053	.035	.01436
WOODLS	.236	.329	-.058	.187	.017	.17014
					-.097	
	<u>Unstandardized coefficients</u>					<u>Constant</u>
MEETINGS	.226	.773	.286	.322		-3.82865
TOTWANTS	-.010	-.008	-.009	.010	.003	1.50443
WOODLS	.557	.527	-.038	.226	.010	6.64815
					-.596	

Table 6

Coefficients in Structural Equations for Model with RWOODLS, MEETINGS,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES		
MEETINGS	.059	.299	.270	.165		.24223
TOTWANTS	-.027	-.030	-.086	.053	.035	.01436
RWOODLS	.239	.266	-.087	.190	.012	.12838
					-.035	

by health (.239) and SOCDES (.190). MEETINGS and TOTWANTS have little impact (.012 and -.035, respectively), and EDUC is not much better (-.087). As for the CANTRIL (Table 7) measure of well-being, SOCDES is the only significant predictor (.321). It has almost three times the predictor power of income (.108) and MEETINGS (-.133). EDUC has almost no impact. TOTWANTS (-.070) and health (.097) are not much better predictors.

Tables 8 through 11 present the coefficients for the measures of CHAPIN and TOTWANTS, coupled with our measures of well-being. As for the predictors of CHAPIN (degree of VA participation), EDUC is the only significant predictor, being eight times larger than INCOME and five times larger than HEALTH and SOCDES. We have already related the predictors of TOTWANTS. As for the predictors of the psychological well-being measures, CHAPIN, health, income, and SOCDES, in that order, all have significant and almost equal impact on BRADHAP (Table 8). EDUC has a moderate negative impact. TOTWANTS has little impact. As for the predictors of WOODLS (Table 9), income has the only significant impact, followed by health, and SOCDES. EDUC and TOTWANTS have relatively little impact, and CHAPIN is not much better. For the RWOODLS measure (Table 10), again no variables make significant predictions. However, income does have a rather large impact, followed by health and SOCDES. EDUC has the next largest impact, followed by CHAPIN. TOTWANTS has the smallest (and an almost nil) impact. As

Table 7

Coefficients in Structural Equations for Model with CANTRIL, MEETINGS,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES		
MEETINGS	.059	.299	.270	.165		.24223
TOTWANTS	-.027	-.030	-.086	.053	.035	-.01436
CANTRIL	.097	.108	.006	.321*	-.133	.10464
<u>Unstandardized coefficients</u>						<u>Constant</u>
MEETINGS	.226	.773	.286	.322		-3.82865
TOTWANTS	-.010	-.008	-.009	.010	.003	1.50443
CANTRIL	.212	.161	.003	.361	-.077	4.66004

*Significant at .05 level or beyond, using F tests.

Table 8

Coefficients in Structural Equations for Model with BRADHAP, CHAPIN,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES	CHAPIN	
CHAPIN	.068	.041	.330*	.070		.12737
TOTWANTS	-.014	-.013	-.025	.069	-.157	.03510
BRADHAP	.345*	.316*	-.166	.303*	.360*	.38861
			<u>Unstandardized coefficients</u>			<u>Constant</u>
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTWANTS	-.005	-.003	-.003	.014	-.004	1.47456
BRADHAP	1.589	.987	-.213	.714	.104	3.15612

*Significant at .05 level or beyond, using F tests.

Table 9

Coefficients in Structural Equations for Model with WOODLS, CHAPIN,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES	CHAPIN	
CHAPIN	.068	.041	.330*	.070		.12737
TOTWANTS	-.014	-.013	-.025	.069	-.157	.03510
WOODLS	.231	.330*	-.083	.182	.093	.17740
	<u>Unstandardized coefficients</u>					<u>Constant</u>
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTWANTS	-.005	-.003	-.003	.014	-.004	1.47456
WOODLS	.545	.529	-.055	.220	.138	6.54496

*Significant at .05 level or beyond, using F tests.

Table 10

Coefficients in Structural Equations for Model with RWOODLS, CHAPIN,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES	CHAPIN	
CHAPIN	.068	.041	.330*	.070		.12737
TOTWANTS	-.014	-.013	-.025	.069	-.157	.03510
RWOODLS	.235	.267	-.110	.186	.082	.13401
	<u>Unstandardized coefficients</u>					<u>Constant</u>
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTWANTS	-.005	-.003	-.003	.014	-.004	1.47456
RWOODLS	.470	.362	-.061	.191	.010	3.93502

for the CANTRIL predictors (Table 11), again SOCDES is the only significant predictor (.317). CHAPIN has the next largest impact (and a negative one). TOTWANTS, HEALTH, INCOME, and EDUC have relatively little impact.

Tables 12 through 15 present the coefficients for the model with MEETINGS and TOTSATIS variables. For these tables, TOTSATIS is the only variable which we have not examined previously. As can be observed, SOCDES is the only variable which has significant impact on TOTSATIS (path coefficient = .379). EDUC has the next largest impact, followed by income and MEETINGS. Health has relatively little impact on TOTSATIS. Finally, TOTSATIS has little impact on BRADHAP (.035) as can be seen in Table 12; TOTSATIS has slightly more impact on WOODLS (.105) as can be seen from Table 13. TOTSATIS has even more impact on RWOODLS (.148, as can be seen from Table 14), and it had the most impact on CANTRIL (.233, as can be seen from Table 15).

Tables 16 through 19 present the coefficients for the model with CHAPIN and TOTSATIS variables with our measures of psychological well-being. As can be seen from Table 16, TOTSATIS has a path coefficient of .203 in relation to BRADHAP, a path coefficient of .185 in relation to WOODLS (Table 17), a path coefficient of .226 in relation to RWOODLS (Table 18), and a path coefficient of .187 in relation to CANTRIL (Table 19).

In summary, none of our exogenous variables are significant

Table 11

Coefficients in Structural Equations for Model with CANTRIL, CHAPIN,
and TOTWANTS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTWANTS	
			EDUC	SOCDES		
CHAPIN	.068	.041	.330*	.070		.12737
TOTWANTS	-.014	-.013	-.025	.069	-.157	.03510
CANTRIL	.103	.077	.042	.317*	-.227	.13522
<u>Unstandardized coefficients</u>						
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTWANTS	-.005	-.003	-.003	.014	-.004	1.47456
CANTRIL	.227	.114	.026	.356	-.031	5.11778

*Significant at .05 level or beyond, using F tests.

Coefficients in Structural Equations for Model with BRADHAP, MEETINGS, and TOTSA TIS Variables

*Significant at .05 level or beyond, using F tests.

Table 13

Coefficients in Structural Equations for Model with WOODLS, MEETINGS,
and TOTSATIS Variables

Dependent variable	<u>Standardized coefficients</u>						R ²
	HEALTH	INCOME	Independent variables			TOTSATIS	
			EDUC	SOCDES	MEETINGS		
MEETINGS	.059	.299	.270	.165			.24223
TOTSATIS	.087	.190	-.307	.379*	-.170		.23913
WOODLS	.229	.312	-.017	.142	.031	.105	.16913
			<u>Unstandardized coefficients</u>				<u>Constant</u>
MEETINGS	.226	.773	.286	.322			-3.82865
TOTSATIS	.066	.098	-.065	.148	-.034		2.98197
WOODLS	.542	.500	-.011	.172	-.019	.325	4.78217

*Significant at .05 level or beyond, using F tests.

Table 14

Coefficients in Structural Equations for Model with RWOODLS, MEETINGS,
and TOTSATIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables			
			EDUC	SOCDES	MEETINGS	
MEETINGS	.059	.299	.270	.165		.24223
TOTSATIS	.087	.190	-.307	.379*	-.170	.23913
RWOODLS	.227	.239	-.038	.132	.036	.14388
			<u>Unstandardized coefficients</u>			<u>Constant</u>
MEETINGS	.226	.773	.286	.322		-3.82865
TOTSATIS	.066	.098	-.065	.148	-.034	2.98197
RWOODLS	.455	.325	-.021	.136	.019	2.57438

*Significant at .05 level or beyond, using F tests.

Table 15

Coefficients in Structural Equations for Model with CANTRIL, MEETINGS,
and TOTSATIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTSATIS	
			EDUC	SOCDES	MEETINGS	
MEETINGS	.059	.299	.270	.165		.24223
TOTSATIS	.087	.190	-.307	.379*	-.170	.23913
CANTRIL	.078	.066	.083	.229	.233	.14106
	<u>Unstandardized coefficients</u>					<u>Constant</u>
MEETINGS	.226	.773	.286	.322		-3.82865
TOTSATIS	.066	.098	-.065	.148	-.034	2.98197
CANTRIL	.172	.098	.051	.257	-.055	2.05870

*Significant at .05 level or beyond, using F tests.

Table 16

Coefficients in Structural Equations for Model with BRADHAP, CHAPIN,
and TOTSA TIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTSA TIS	
			EDUC	SOCDES	CHAPIN	
CHAPIN	.068	.041	.330*	.070		.12737
TOTSA TIS	.106	.156	-.215	.380*	-.417*	.36915
BRADHAP	.323*	.283*	-.124	.231	.432*	.40890
	<u>Unstandardized coefficients</u>					<u>Constant</u>
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTSA TIS	.081	.081	-.046	.148	-.020	3.02672
BRADHAP	1.486	.884	-.159	.545	.125	.79924

*Significant at .05 level or beyond, using F tests.

Coefficients in Structural Equations for Model with WOODLS, CHAPIN, and TOTSATIS Variables

*Significant at .05 level or beyond, using F tests.

Table 18

Coefficients in Structural Equations for Model with RWOODLS, CHAPIN,
and TOTSA TIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	EDUC	SOCDES	CHAPIN	TOTSA TIS
CHAPIN	.068	.041	.330*	.070		.12737
TOTSA TIS	.106	.156	-.215	.380*	-.417*	.36915
RWOODLS	.211	.232	-.061	.099	.180	.16570
	<u>Unstandardized coefficients</u>					<u>Constant</u>
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTSA TIS	.080	.081	-.046	.148	-.020	3.02672
RWOODLS	.423	.315	-.034	.101	.022	1.96389

*Significant at .05 level or beyond, using F tests.

Table 19

Coefficients in Structural Equations for Model with CANTRIL, CHAPIN,
and TOTSATIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTSATIS	
			EDUC	SOCDES	CHAPIN	
CHAPIN	.068	.041	.330*	.070		.12737
TOTSATIS	.106	.156	-.215	.380	-.417*	.36915
CANTRIL	.085	.049	.085	.238	-.132	.14658
			<u>Unstandardized coefficients</u>			<u>Constant</u>
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTSATIS	.080	.081	-.046	.148	-.020	3.02672
CANTRIL	.187	.073	.052	.268	-.018	2.60230

*Significant at .05 level or beyond, using F tests.

predictors of MEETINGS, although income and EDUC, in that order, do have relatively large effects. For the CHAPIN measure, EDUC is the only significant predictor, totally overshadowing the other variables. TOTSATIS is predicted significantly by SOCDES and CHAPIN; EDUC has a large negative effect. TOTWANTS is not predicted well by any of the exogenous variables, the largest predictor (EDUC) only having a coefficient of $-.086$. As for the psychological well-being measures, significant predictors of BRADHAP include health, income, SOCDES, and CHAPIN, in various models. The largest (but not quite significant) predictor of WOODLS is income. There are no significant predictors of RWOODLS, although income has a rather large effect. For CANTRIL, the only almost significant predictor is SOCDES.

In comparing the strength of the path coefficients for VA activity versus VA satisfaction, we find that the following relationships hold: For BRADHAP, MEETINGS has more impact ($.193$) than TOTWANTS ($.022$); CHAPIN has more impact ($.360$) than TOTWANTS ($.077$); MEETINGS has more impact ($.199$) than TOTSATIS ($.035$); and CHAPIN has more impact ($.432$) than TOTSATIS ($.203$). For WOODLS, TOTWANTS ($-.097$) has more impact than MEETINGS ($.017$); CHAPIN ($.093$) has more impact than TOTWANTS ($-.084$); TOTSATIS has more impact ($.105$) than MEETINGS ($.031$); and TOTSATIS has slightly more impact ($.185$) than CHAPIN ($.184$). For RWOODLS, TOTWANTS ($-.035$) has more impact than MEETINGS

(.012); CHAPIN has more impact than TOTWANTS (.082 versus -.023); TOTSATIS has more impact than MEETINGS (.148 to .036); and TOTSATIS has more impact than CHAPIN (.226 to .180). Finally, for CANTRIL, MEETINGS has more impact (-.133) than TOTWANTS (-.070); CHAPIN has more impact (-.227) than TOTWANTS (-.106); TOTSATIS has more impact (.233) than MEETINGS (-.096); and CHAPIN has less impact than TOTSATIS (-.132 to .187).

Table 1 in Appendix B presents the overall correlation for the variables used in these path analyses. As can be seen from this table, we also had some differences in signs from what we expected among the exogenous variables. However, none of these sign differences are significant. The relationships among our exogenous variables are as follows: SOCDES and EDUC = -.086, SOCDES and INCOME = -.242, SOCDES and HEALTH = -.090; EDUC and INCOME = .503 (significant), EDUC and HEALTH = -.008, and INCOME and HEALTH = .040. From Table 1, we can also examine the relationships among our various measures. The zero-order correlation between CHAPIN and MEETINGS, our two measures of VA activity, is .551, which is significant. The zero-order correlation between TOTSATIS and TOTWANTS, our two measures of VA satisfaction, is .438, which is also significant. As for our measures of psychological well-being, the zero-order correlations are as follows: BRADHAP and WOODLS = .437 (significant), BRADHAP and RWOODLS = .386 (significant), BRADHAP and CANTRIL = .353 (significant), WOODLS and

CANTRIL = .368 (significant), RWOODLS and CANTRIL = .401 (significant), and WOODLS and RWOODLS = .892 (significant).

We can also examine the models as a whole in terms of their usefulness in predicting psychological well-being. As can be observed from Tables 4 through 19, the amount of explained variance (R^2) ranges from 10% with the CANTRIL, MEETINGS, and TOTWANTS model (Table 7) to 41% with the BRADHAP, CHAPIN, and TOTSATIS model (Table 16). Since the latter model predicts the most variance, we will examine this model more closely through the Alwin-Hauser decomposition technique. Table 20 shows the coefficients in structural and reduced forms which we used for the decomposition. Table 21 shows the decomposition of effects in this model. As can be observed from the decomposition, most of the effects are direct. The largest indirect effect is the one from EDUC through CHAPIN to BRADHAP. Otherwise, the indirect paths are trivial.

Figure 3 presents the path model of the CHAPIN, TOTSATIS, and BRADHAP (Table 16) with significant paths only.

Results of the Alternative Approach

We have reported our concern that our method of averaging VA satisfaction could create problems, and, therefore, we decided to examine the effects of the VA the respondent was most active in as measured by the Chapin scale (ACTIVE) and the degree of satisfaction that the respondent reported with that VA (ACSATIS). Table 22 shows the results of that analysis with BRADHAP as the measure of psychological well-being. In

Table 20

Coefficients in Structural and Reduced Form Equations for Model with BRADHAP,
CHAPIN, and TOTSATIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables		TOTSATIS	
			EDUC	SOCDES	CHAPIN	
CHAPIN	.068	.041	.330*	.070		.12737
TOTSATIS	.077	.139	-.353*	.351*		.21724
	.106	.156	-.215	.380*	-.417*	.36915
BRADHAP	.368*	.329*	-.053	.332*		.27729
	.344*	.315*	-.168	.308*	.348*	.38286
	.323*	.283*	-.124	.231*	.432*	.40890
					.203	
<u>Unstandardized coefficients</u>						
						Constant
CHAPIN	1.089	.440	1.473	.573		-4.30356
TOTSATIS	.059	.072	-.075	.137		3.11240
	.080	.081	-.046	.148	-.020	3.02672
BRADHAP	1.693	1.028	-.068	.784		4.08001
	1.584	.983	-.216	.727	.100	4.51125
	1.486	.884	-.159	.545	.125	.79924
					1.226	

*Significant at .05 level or beyond, using F tests.

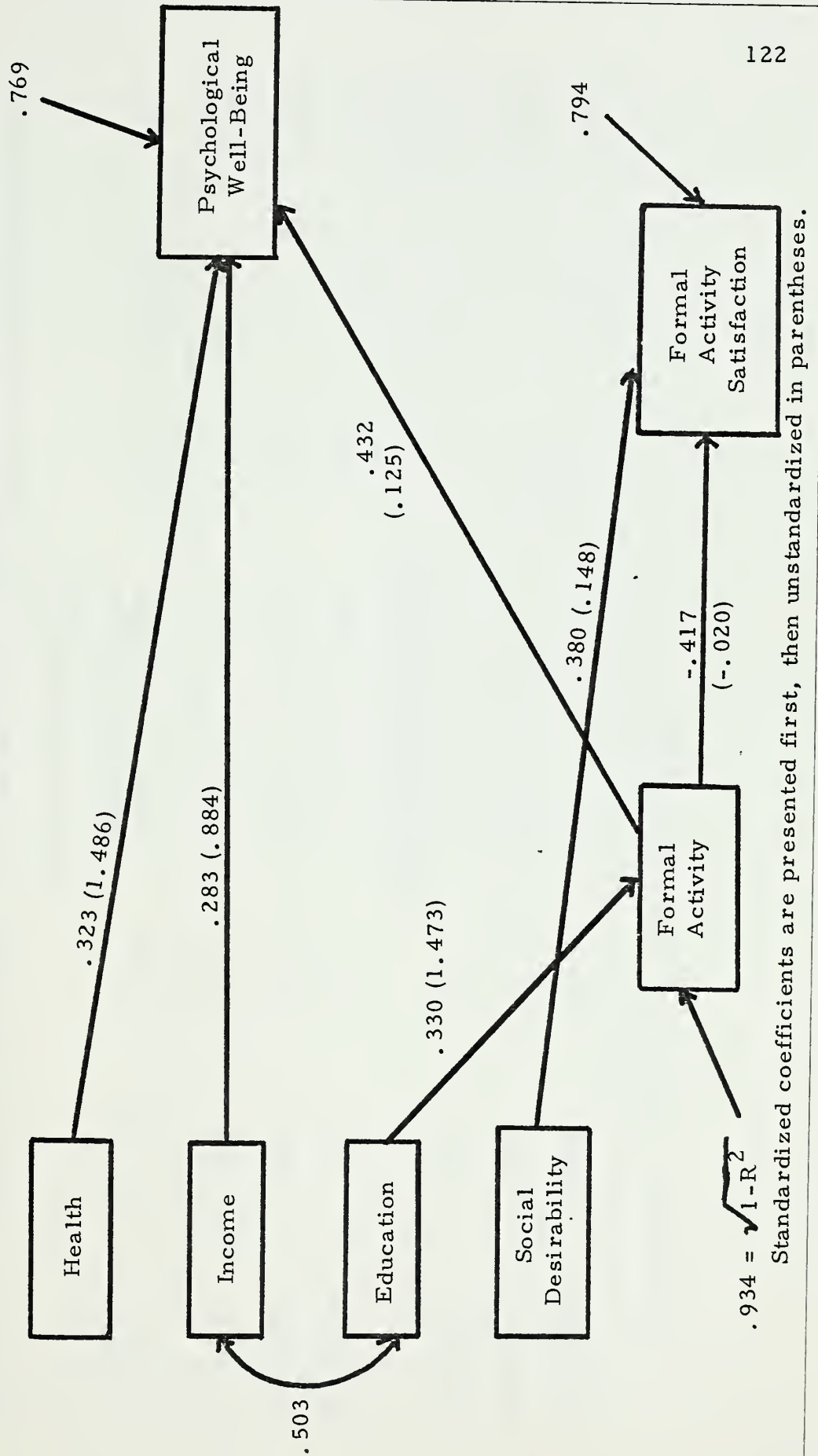
Table 21

Decomposition of Effects of Variables in BRADHAP, CHAPIN, and TOTSATIS Model

Dependent variable	Predetermined variable	Total association	Total effect	Indirect effect via		Direct effect
				CHAPIN	TOTSATIS	
CHAPIN	HEALTH	.061	.068	--	--	.068
	INCOME	.192	.041	--	--	.041
	EDUC	.344	.330	--	--	.330
	SOCDES	.026	.070	--	--	.070
TOTSATIS	HEALTH	.054	.077	-.028	--	.106
	INCOME	-.120	.139	-.017	--	.156
	EDUC	-.313	-.353	-.138	--	-.215
	SOCDES	.340	.351	-.029	--	.380
	CHAPIN	-.445	-.417	--	--	-.417
BRADHAP	HEALTH	.351	.368	.024	.021	.323
	INCOME	.237	.329	.014	.032	.283
	EDUC	.081	-.053	.115	-.044	-.124
	SOCDES	.224	.332	.024	.077	.231
	CHAPIN	.379	.348	--	--	.432
	TOTSATIS	.111	.203	--	--	.203

Figure 3

Path Model of BRADHAP, CHAPIN, and TOTSATIS Model, Significant Paths Only



Standardized coefficients are presented first, then unstandardized in parentheses.

Table 22

Coefficients in Structural Equations for Model with BRADHAP, ACTIVE,
and ACSATIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables			
			EDUC	SOCDES	ACTIVE	ACSATIS
ACTIVE	.085	.054	.335*	.048		.13831
ACSATIS	.054	.212	-.240	.203	-.104	.10058
BRADHAP	.333*	.283	-.129	.289*	.338*	.38416
			<u>Unstandardized coefficients</u>			<u>Constant</u>
ACTIVE	.375	.162	.412	.109		1.22099
ACSATIS	.042	.111	-.052	.080	-.018	3.38600
BRADHAP	1.533	.883	-.166	.682	.353	.91990

*Significant at .05 level or beyond, using F tests.

general, the relationships among and between the variables remain about the same in Table 22 as the analysis using CHAPIN and TOTSATIS (Table 16). We can also see (Table 1, Appendix B) that activity, measured by the Chapin scale, in the VA the individual was most involved in (ACTIVE) correlates highly with his/her total activity (CHAPIN): $r = .74$. Similarly, the zero-order correlation between ACSATIS, satisfaction with the VA the person was most active in, and TOTSATIS, the total degree of satisfaction, is .640. The amount of variance explained by the ACTIVE, ACSATIS, and BRADHAP model is .38416, as opposed to .40890 explained by the CHAPIN, TOTSATIS, and BRADHAP model.

Results of the Characteristics Analyses

Comparison of the Levels of Analysis

Before reporting on the results related to our characteristics analysis, we will examine the effects of the individual analysis versus the effects of the VA characteristics analysis, in order to ascertain the differences. Table 23 presents the path coefficients for the model with BRADHAP, SCHAPIN, and SISATIS variables. We will be comparing this table with Table 16, which presented the BRADHAP, CHAPIN, and TOTSATIS variables. In comparing the signs of the coefficients between the two models, we see that there are no sign changes in significant variables; the only sign change is between the activity variable and health. Education is significantly related to the activity measure in both models, although the magnitude is reduced from the first model to the second (.330 versus .172). As

Table 23

Coefficients in Structural Equations for Model with BRADHAP, SCHAPIN,
and SISA TIS Variables

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	Independent variables			
			EDUC	SOCDES	SCHAPIN	SISA TIS
SCHAPIN	-.013	.054	.172*	.001		.04012
SISA TIS	.059	.143*	-.268*	.368*	-.037	.20634
BRADHAP	.399*	.288*	-.120*	.238*	.072	.27873
	<u>Unstandardized coefficients</u>					<u>Constant</u>
SCHAPIN	-.052	.136	.185	.020		4.24508
SISA TIS	.070	.106	-.844	.214	-.011	2.58332
BRADHAP	1.739	.787	-.140	.512	.778	6.74509

*Significant at .05 level or beyond, using F tests.

for the predictors of VA satisfaction, except for VA activity (which substantially decreases in magnitude), the relationships among the variable remain the same, although in general the magnitudes are decreased in the second model. (The exception is the effect of EDUC on SISATIS, which has a path coefficient of $-.268$, whereas in the first model, the relationship between EDUC and TOTSATIS was $-.215$.) As for the predictors of BRADHAP, the coefficients remain approximately the same, except for the variables related to VA activity and VA satisfaction, which, of course, are different; these have reduced magnitudes in relation to BRADHAP. Overall, whereas our first model predicted about 41% of the variance in BRADHAP, our second model predicts only about 29% of the variance; this attenuation seems mainly due to the decrease in magnitude of the VA activity and VA satisfaction variables, as expected. Nevertheless, this model comparison indicates that the relative relationships among the variables remain approximately the same.

Results of the Characteristics Models

Size Model

Table 24 presents the results of our analysis concerning size. As can be observed from this table, for the size variable, income has a significant positive effect ($.249$). As in previous findings in our study, there is a negative relationship between EDUC and SISATIS ($-.271$, which is significant) and between EDUC and BRADHAP ($-.068$). Unexpectedly, there are positive, significant relationships between SIZE and SISATIS

Table 24

Coefficients in Structural Equations for Model with SIZE Characteristic

Dependent variable	<u>Standardized coefficients</u>						R ²
	HEALTH	INCOME	EDUC	SOCDES	SIZE	SCHAPIN	SISATIS
SIZE	-.052	.249*	-.114	.069			.05462
SCHAPIN	.037	.114	.212*	.039	-.195*		.10442
SISATIS	.075	.061	-.271*	.334*	.150*	.028	.22303
BRADHAP	.418*	.245*	-.068	.230*	.183*	.097	.33005
	<u>Unstandardized coefficients</u>						<u>Constant</u>
SIZE	-9.463	28.460	-5.506	6.085			44.28653
SCHAPIN	.150	.290	.226	.077	-.004		2.87060
SISATIS	.086	.044	-.083	.187	.001	.008	2.72148
BRADHAP	1.832	.679	-.080	.492	.004	.106	5.25475

*Significant at .05 level or beyond, using F tests.

(.150) and SIZE and BRADHAP (.183). As for the predictors of SIZE, income is the only significant predictor and is in the opposite direction from what we expected. EDUC and HEALTH do have slight negative effects, in that order, as we hypothesized. Also, SOCDES has the expected positive effect, although it is relatively small (.069). As for the predictors of SCHAPIN, EDUC has the largest and expected effect (.212, significant), followed by SIZE, which has the expected negative effect (-.195, significant). As we hypothesized, income has a slight positive effect (.114), followed by SOCDES and health. The largest predictor of SISATIS is SOCDES (.334, significant), followed by EDUC, which has a significant negative effect (-.271) and SIZE (.150, significant and unexpected). Health, income, and SCHAPIN, in that order, have relatively small effects (.075, .061, and .028). Finally, for the predictors of BRADHAP, health has the largest impact (.418, significant), followed by income (.245, significant), SOCDES (.230, significant), and SIZE (.183, significant in the unexpected direction). SISATIS and SCHAPIN have small positive effects (.111 and .097, respectively), and EDUC has a small negative effect (-.068). Overall, this model predicts 33% of the variance in BRADHAP.

Table 25 presents the coefficients in structural and reduced form equations which we used to calculate the decomposition of effects in this model. Table 26 presents the results of the decomposition. In general, this decomposition indicates that the majority of our effects are direct.

Table 25

Coefficients in Structural and Reduced Form Equations for Model with SIZE Characteristic

Dependent variable	Standardized coefficients							R ²
	HEALTH	INCOME	Independent variables			SCHAPIN	SISA TIS	
			EDUC	SOCDES	SIZE			
SIZE	-.052	.249*	-.114	.069				.05462
SCHAPIN	-.013	.054	.172*	.001				.04012
	.037	.114	.212*	.039				.10442
SISA TIS	.060	.141*	-.274*	.368*				.20500
	.076	.064	-.265*	.335*				.22233
	.075	.061	-.271*	.334*		.028		.22303
BRADHAP	.403*	.304*	-.131*	.269*				.26863
	.430*	.263*	-.077	.271*				.31156
	.426*	.251*	-.098	.267*		.100		.32051
	.418*	.245*	-.068	.230*		.097	.111	.33005
								<u>Constant</u>
SIZE	-9.463	28.460	-5.506	6.085				44.28653
SCHAPIN	-.052	.136	.185	.002				4.24508
	.150	.290	.226	.077				2.87060
SISA TIS	.703	.104	-.086	.214				2.53685
	.088	.046	-.081	.187				2.74435
	.086	.044	-.083	.187		.008		2.72148
BRADHAP	1.757	.830	-.153	.578				7.86157
	1.885	.729	-.090	.580				6.71869
	1.868	.697	-.115	.571		.109		6.40491
	1.832	.679	-.080	.492		.106	.423	5.25475

*Significant at .05 level or beyond, using F tests.

Table 26

Decomposition of Effects of Variables in SIZE Model

Dependent variable	Predetermined variable	Total association	Total effect	Indirect effect via			Direct effect
				SIZE	SCHAPIN	SISATIS	
SIZE	HEALTH	-.054	-.052	--	--	--	-.052
	INCOME	.189	.249	--	--	--	.249
	EDUC	-.022	-.114	--	--	--	-.114
	SOCDES	.030	.069	--	--	--	.069
SCHAPIN	HEALTH	-.028	-.013	-.050	--	--	.037
	INCOME	.120	.054	-.060	--	--	.114
	EDUC	.194	.172	-.040	--	--	.212
	SOCDES	-.033	.001	-.038	--	--	.039
SISATIS	SIZE	-.179	-.195	--	--	--	-.195
	HEALTH	.048	.060	-.016	.001	--	.075
	INCOME	-.051	.141	.077	.003	--	.061
	EDUC	-.272	-.274	-.009	.006	--	-.271
BRADHAP	SOCDES	.366	.368	.033	.001	--	.334
	SIZE	.168	.145	--	-.005	--	.150
	SCHAPIN	-.086	.028	--	--	--	.028
	HEALTH	.383	.403	-.027	.005	.008	.418
	INCOME	.179	.304	.041	.012	.006	.245
	EDUC	-.080	-.131	-.054	.021	-.030	-.068
	SOCDES	.183	.269	-.002	.004	.037	.230
	SIZE	.216	.180	--	-.019	.016	.183
	SCHAPIN	.057	.100	--	--	.003	.097
	SISATIS	.202	.111	--	--	--	.111

Age-Graded Model

Table 27 presents the results of our model concerning age-gradedness. As can be seen from this table, INCOME and EDUC are relatively strong, significant predictors of AGEGRAD, albeit in the unexpected negative direction ($-.220$ and $-.199$, respectively). As for SCHAPIN, EDUC is again a significant predictor ($.189$). The other variables have relatively little impact. However, except for HEALTH, these effects are in the expected direction. There is a slight tendency, for instance, for those in age-graded VA's to be more active in those VA's ($.084$). Income ($.159$), SOCDES ($.375$), and EDUC ($-.253$) are significant predictors of SISATIS. There is a slight tendency for people in age-graded VA's to be more satisfied with these groups, as expected. As for the predictors of BRADHAP, health ($.402$), SOCDES ($.223$), income ($.261$), and EDUC ($-.142$) are significant. There is a significant and unexpected tendency for people in age-graded VA's to have lower scores on BRADHAP ($-.117$). SCHAPIN and SISATIS have relatively little impact. The overall amount of variance explained by this model is 29%.

Table 28 presents the structural and reduced form equations which we used in our decomposition of effects; Table 29 presents the results. Again, the effects are mostly direct.

The Church-Related Model

Table 30 presents the results of our model concerning the CHURCH variable. As expected, there is a negative relationship between CHURCH

Table 27

Coefficients in Structural Equations for Model with AGEGRAD Variable

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	EDUC	SOCDES	AGEGRAD	SISATIS
AGEGRAD	.024	-.220*	-.199*	-.100		.11849
SCHAPIN	-.015	.073	.189*	.009	.084	.04634
SISATIS	.057	.159*	-.253*	.375*	.069	.21049
BRADHAP	.402*	.261*	-.142*	.223*	-.117*	.29076
	<u>Unstandardized coefficients</u>					<u>Constant</u>
AGEGRAD	.015	-.087	-.335	-.031		1.62029
SCHAPIN	-.061	.183	.203	.019	.537	3.37497
SISATIS	.068	.117	-.080	.218	.128	2.38175
BRADHAP	1.750	.711	-.167	.479	-.813	7.93512

*Significant at .05 level or beyond, using F tests.

Table 28

Coefficients in Structural and Reduced Form Equations for Model with AGEGRAD Variable

Dependent variable	<u>Standardized coefficients</u>							SISATIS	SCHAPIN	R ²
	HEALTH	INCOME	Independent variables							
			EDUC	SOCDES	AGEGRAD					
AGEGRAD	.024	-.220*	-.199*	-.100						.11849
SCHAPIN	-.013	.054	.172*	.001						.04012
SISATIS	-.015	.073	.189*	.009	.084					.04634
	.060	.141*	-.274*	.368*						.20500
	.058	.156*	-.261*	.375*	.065					.20875
	.057	.159*	-.253*	.375*	.069			-.043		.21049
BRADHAP	.403*	.304*	-.131*	.269*						.26863
	.406*	.281*	-.152*	.258*	-.105					.27829
	.407*	.275*	-.166*	.257*	-.111*			.077		.28400
	.402*	.261*	-.142*	.223*	-.117*			.081	.092	.29076
<u>Unstandardized coefficients</u>										
AGEGRAD	.015	-.087	-.335	-.031						Constant
SCHAPIN	-.052	.136	.185	.002						1.62029
SISATIS	-.061	.183	.203	.019	.537					4.24508
	.703	.104	-.086	.214						3.37493
	.068	.115	-.082	.218	.122					2.53685
	.068	.117	-.080	.218	.128			-.012		2.33957
BRADHAP	1.757	.830	-.153	.578						2.38175
	1.768	.767	-.177	.556	-.724					7.86157
	1.773	.751	-.194	.554	-.769			.084		9.03442
	1.750	.711	-.167	.479	-.813			.088	.343	8.75183
										7.93512

*Significant at .05 level or beyond, using F tests.

Table 29

Decomposition of Effects of Variables in AGEGRAD Model

Dependent variable	Predetermined variable	Total association	Total effect	Indirect effect via			Direct effect
				AGEGRAD	SCHAPIN	SISATIS	
AGEGRAD	HEALTH	.055	.024	--	--	--	.024
	INCOME	-.274	-.220	--	--	--	-.220
	EDUC	-.272	.199	--	--	--	-.199
	SOCDES	-.025	-.100	--	--	--	-.100
SCHAPIN	HEALTH	-.028	-.013	.002	--	--	-.015
	INCOME	.120	.054	-.019	--	--	.073
	EDUC	.194	.172	-.017	--	--	.189
	SOCDES	-.033	.001	-.008	--	--	.009
SISATIS	AGEGRAD	.012	.084	--	--	--	.084
	HEALTH	.048	.060	.002	.001	--	.057
	INCOME	-.051	.141	-.015	-.003	--	.159
	EDUC	-.272	-.274	-.013	-.008	--	-.253
BRADHAP	SOCDES	.366	.368	-.007	.000	--	.375
	AGEGRAD	.087	.065	--	-.004	--	.069
	SCHAPIN	-.086	-.043	--	--	--	-.043
	HEALTH	.383	.403	-.003	-.001	.005	.402
	INCOME	.179	.304	.023	.006	.014	.261
	EDUC	-.080	-.131	.021	.014	-.024	-.142
	SOCDES	.183	.269	.011	.001	.034	.223
	AGEGRAD	-.124	-.105	--	.006	.006	-.117
	SCHAPIN	.057	.077	--	--	-.004	.081
	SISATIS	.202	.092	--	--	--	.092

Table 30

Coefficients in Structural Equations for Model with CHURCH Variable

Dependent variable	<u>Standardized coefficients</u>								R ²
	HEALTH	INCOME	Independent variables				SCHAPIN	SISATIS	
			EDUC	SOCDES	CHURCH				
CHURCH	-.111	-.072	-.200*	-.094					.06384
SCHAPIN	-.017	.051	.164*	-.003	-.041				.04168
SISATIS	.063	.145*	-.262*	.371*	.027	-.036			.20704
BRADHAP	.387*	.280*	-.140*	.226*	-.108*	.068	.087		.28967
	<u>Unstandardized coefficients</u>								<u>Constant</u>
CHURCH	-.064	-.026	-.031	-.027					1.08765
SCHAPIN	-.071	.129	.177	-.006	-.286				4.55581
SISATIS	.073	.107	-.083	.216	.558	-.011			2.52126
BRADHAP	1.685	.765	-.164	.487	-.820	.073	.323		7.62359

*Significant at .05 level or beyond, using F tests.

and health ($-.111$), income ($-.072$), and EDUC ($-.200$, significant). There is a negative relationship between SOCDES and CHURCH ($-.094$), which was unexpected. As for the predictors of SCHAPIN, EDUC is again significant ($.164$). The effects of health, income, and CHURCH are rather small. There is a slight and unexpectedly negative tendency for people in church-related VA's to be less active ($-.041$). As for the predictors of SISATIS, SOCDES is again the largest ($.371$, significant), followed by EDUC (significant path coefficient of $-.262$). Income is positively and significantly related ($.145$). The effects of health, SCHAPIN, and CHURCH are relatively small; however, as expected, there is a very slight tendency for those in church-related groups to be more satisfied with those VA's. As for the predictors of BRADHAP, health, income, SOCDES, EDUC, and CHURCH are significant predictors, in that order. CHURCH is surprisingly negatively related, however. The effects of SCHAPIN and SISATIS are relatively slight. Overall, this model explains 29% of the variance in BRADHAP.

Table 31 shows the path coefficients in structural and reduced form equations used to calculate the decomposition shown in Table 32. From Table 32, one can see that the majority of the effects are direct.

The Instrumental/Expressive Model

Table 33 presents the results of our analysis of the EXPIN model. As can be seen from this table, there is a positive relationship between EDUC and EXPIN ($.281$, significant), as expected. The other predictors

Table 31

Coefficients in Structural and Reduced Form Equations for Model with CHURCH Variable

Dependent variable	<u>Standardized coefficients</u>							R ²
	HEALTH	INCOME	EDUC	SOCDES	CHURCH	SCHAPIN	SISATIS	
CHURCH	-.111	-.072	-.200*	-.094				.06384
SCHAPIN	-.013	.054	.172*	.001				.04012
SISATIS	-.017	.051	.164*	-.003	-.041			.04168
	.060	.141*	-.274*	.368*				.20500
	.063	.143*	-.268*	.371*	.029			.20577
	.063	.145*	-.262*	.371*	.027	-.036		.20704
BRADHAP	.403*	.304*	-.131*	.269*				.26863
	.391*	.296*	-.153*	.258*	-.108*			.27965
	.392*	.293*	-.163*	.259*	-.106*	.065		.28365
	.387*	.280*	-.140*	.226*	-.108*	.068	.087	.28967
								<u>Constant</u>
CHURCH	-.064	-.026	-.031	-.027				1.08765
SCHAPIN	-.052	.136	.185	.002				4.24508
SISATIS	-.071	.129	.177	-.006	-.286			4.55581
	.703	.104	-.086	.214				2.53685
	.074	.106	-.084	.216	.059			2.47284
	.073	.107	-.083	.216	.558	-.011		2.52126
BRADHAP	1.757	.830	-.153	.578				7.86157
	1.704	.808	-.178	.556	-.822			8.75571
	1.709	.799	-.190	.557	-.802	.070		8.43729
	1.685	.765	-.164	.487	-.820	.073	.323	7.62359

*Significant at .05 level or beyond, using F tests.

Table 32

Decomposition of Effects of Variables in CHURCH Model

Dependent variable	Predetermined variable	Total association	Total effect	Indirect effect via			Direct effect
				CHURCH	SCHAPIN	SISATIS	
CHURCH	HEALTH	-.086	-.111	--	--	--	-.111
	INCOME	-.123	-.072	--	--	--	-.072
	EDUC	-.207	-.200	--	--	--	-.200
	SOCDES	-.043	-.094	--	--	--	-.094
SCHAPIN	HEALTH	-.028	-.013	.004	--	--	-.017
	INCOME	.120	.054	.003	--	--	.051
	EDUC	.194	.172	.008	--	--	.164
	SOCDES	-.033	.001	.004	--	--	-.003
SISATIS	CHURCH	-.079	-.041	--	--	--	-.041
	HEALTH	.048	.060	-.003	.000	--	.063
	INCOME	-.051	.141	-.002	-.002	--	.145
	EDUC	-.272	-.274	-.006	-.006	--	-.262
BRADHAP	SOCDES	.366	.368	-.003	.000	--	.371
	CHURCH	.045	.029	--	.002	--	.027
	SCHAPIN	-.086	-.036	--	--	--	-.036
	HEALTH	.383	.403	.012	-.001	.005	.387
	INCOME	.179	.304	.008	.003	.013	.280
	EDUC	-.080	-.131	.022	.010	-.023	-.140
	SOCDES	.183	.269	.011	-.001	.033	.226
	CHURCH	-.158	-.108	--	-.002	.002	-.108
	SCHAPIN	.057	.065	--	--	-.003	.068
	SISATIS	.202	.087	--	--	--	.087

Table 33

Coefficients in Structural Equations for Model with EXPIN Variable

Dependent variable	<u>Standardized coefficients</u>					R ²
	HEALTH	INCOME	EDUC	SOCDES	EXPIN	
EXPIN	.019	.014	.281*	.049		.07995
SCHAPIN	-.015	.052	.137*	-.005	.124*	.05431
SISA TIS	.061	.144*	-.244*	.373*	-.092	.21410
BRADHAP	.400*	.289*	-.115*	.240*	-.022	.27918
<u>Unstandardized coefficients</u>						
EXPIN	.015	.007	.058	.018		Constant -.21650
SCHAPIN	-.062	.132	.148	-.010	.653	4.38642
SISA TIS	.072	.106	-.768	.217	-.142	2.53890
BRADHAP	1.742	.788	-.134	.516	-.127	.301 6.72788

*Significant at .05 level or beyond, using F tests.

of EXPIN are rather weak. However, these predictors are all in the hypothesized positive direction. As for the predictors of SCHAPIN, EDUC is again a strong predictor (.137), followed by EXPIN (.124, significant in the expected direction). Health, income, and EDUC are rather weak predictors. As for the predictors of SISATIS, SOCDES is again the strongest (.373, significant), followed by EDUC (-.244, significant), and income (.144, significant). EXPIN, SCHAPIN, and health are relatively weak predictors. EXPIN, though, has a slight negative (unexpected) relationship to SISATIS (-.092). As for the predictors of BRADHAP, health, income, SOCDES, and SISATIS have relatively small effects and EXPIN has an unexpected, albeit very small, negative effect. Overall, this model predicts 28% of the variance in BRADHAP.

Table 34 presents the coefficients in structural and reduced form equations, and Table 35 shows the decomposition calculated from these coefficients. As can be seen (Table 35), most of the effects are direct:

Table 3 in Appendix B presents the overall correlation matrix for the variables in these characteristics models.

Table 34

Coefficients in Structural and Reduced Form Equations for Model with EXPIN Variable

Dependent variable	<u>Standardized coefficients</u>							R ²
	HEALTH	INCOME	EDUC	SOCDES	EXPIN	SCHAPIN	SISATIS	
EXPIN	.019	.014	.281*	.049				.07995
SCHAPIN	-.013	.054	.172*	.001				.04012
SISATIS	-.015	.052	.137*	-.005	.124*			.05431
	.060	.141*	-.274*	.368*				.20500
	.061	.143*	-.247*	.373*	-.096			.21344
BRADHAP	.061	.144*	-.244*	.373*	-.092	.022		.21410
	.403*	.304*	-.131*	.269*				.26863
	.404*	.304*	-.125*	.270*	-.021			.26904
	.405*	.300*	-.135*	.270*	-.030	.072		.27399
	.400*	.289*	-.115*	.240*	-.022	.074	.081	.27918
<u>Unstandardized coefficients</u>								
EXPIN	.015	.007	.058	.018				-.21650
SCHAPIN	-.052	.136	.185	.002				4.24508
SISATIS	-.062	.132	.148	-.010	.653			4.38642
	.703	.104	-.086	.214				2.53685
	.072	.105	-.078	.217	-.147			2.50500
BRADHAP	.072	.106	-.768	.217	-.142	-.008		2.53890
	1.757	.830	-.153	.578				7.86157
	1.759	.831	-.146	.580	-.119			7.83576
	1.764	.820	-.157	.581	-.170	.078		7.49227
	1.742	.788	-.134	.516	-.127	.081	.301	6.72788
<u>Constant</u>								

*Significant at .05 level or beyond, using F tests.

Table 35

Decomposition of Effects of Variables in EXPIN Model

Dependent variable	Predetermined variable	Total association	Total effect	Indirect effect via			Direct effect
				EXPIN	SCHAPIN	SISA TIS	
EXPIN	HEALTH	-.007	.019	--	--	--	.019
	INCOME	.109	.014	--	--	--	.014
	EDUC	.278	.281	--	--	--	.281
	SOCDES	.008	.049	--	--	--	.049
SCHAPIN	HEALTH	-.028	-.013	.002	--	--	-.015
	INCOME	.120	.054	.002	--	--	.052
	EDUC	.194	.172	.035	--	--	.137
	SOCDES	-.033	.001	.006	--	--	-.005
SISA TIS	EXPIN	.168	.124	--	--	--	.124
	HEALTH	.048	.060	-.001	.000	--	.061
	INCOME	-.051	.141	-.002	-.001	--	.144
	EDUC	-.272	-.274	-.027	-.003	--	-.244
BRADHAP	SOCDES	.366	.368	-.005	.000	--	.373
	EXPIN	-.146	-.096	--	-.004	--	-.092
	SCHAPIN	-.086	.022	--	--	--	.022
	HEALTH	.383	.403	-.001	-.001	.005	.400
	INCOME	.179	.304	.000	.004	.011	.289
	EDUC	-.080	-.131	-.006	.010	-.020	-.115
	SOCDES	.183	.269	-.001	.000	.030	.240
	EXPIN	-.023	-.021	--	.009	-.008	-.022
	SCHAPIN	.057	.072	--	--	-.002	.074
	SISA TIS	.202	.081	--	--	--	.081

CHAPTER IV

DISCUSSION

Discussion of Individual Analyses

Measurement

One goal of our research was to assess the possibility that past inconsistent findings were due to differences in measurement. Our research shows that this is quite likely. With the three psychological well-being measures we used, we found that Bradburn's (1969) Affect Balance Scale was the only measure which correlated significantly with a measure of VA activity. Wood et al.'s (1969) scale did not correlate significantly with VA activity, even though the effect was in the expected positive direction. Even with the items related to past removed, this scale did not correlate significantly and, in fact, item removal resulted in slightly less correlation! The Cantril Ladder (1965) was negatively related to both measures of VA activity. Except for this last measure, which has been related significantly and positively to VA activity in at least one study (i. e., Palmore & Luikart, 1972), our findings support those of past research. Research using Wood et al.'s scale or its predecessor, Neugarten et al.'s (1961) scale, have generally found that

controlling for health and SES diminishes the effect to a weak or non-significant level (e.g., Bull & Aucoin, 1975; Cutler, 1973; Edwards & Klemmack, 1973; Lemon, Bengtson, & Peterson, 1972). However, research using the Affect Balance Scale has found a positive, significant effect, even after controlling for health and SES (e.g., Graney, 1975).

The differential findings of these measures is important in light of the fact that most studies only utilize one measure of psychological well-being. Choice of the outcome measure, then, seems crucial. Recognition of the importance of choice of well-being measure is perhaps the impetus for the recent popularity of publications on the nature of various well-being scales (e.g., George & Bearon, 1979; Nydegger, 1977). In general, researchers have attempted to equate these measures under the umbrella term "psychological well-being" (see discussion by Larson, 1978). After all, some research has indicated that these measures tend to be directed toward a common underlying construct which can be called "psychological well-being" (e.g., Lohmann, 1977). However, our differential findings suggest that these measures tap divergent constructs. Whether or not one scale is a more valid measure of "psychological well-being" than another remains to be seen. Our findings suggest, however, that the equation of "life satisfaction" and "happiness" as measures of the same construct is potentially misleading. As Campbell et al. (1976) report, although happiness is sometimes used as a synonym for life satisfaction, this term more precisely refers to transitory moods of gaiety or pleasure.

A report of "life satisfaction," however, is essentially a cognitive assessment of one's progress toward desired goals (Andrews & Withey, 1976). Further, in that "life as a whole" or "life in general" is the referent, a long-term time perspective (Campbell et al., 1976) and non-specific life conditions (Andrews & Withey, 1976) are implied. George and Bearon (1979) have reported that Neugarten et al.'s (1961) scale is "probably the most widely used instrument for assessing subjective perceptions of well-being among older individuals" (p. 57). Yet, George and Bearon also report that the definition on which this scale is based goes beyond the definition of life satisfaction and is "conceptually ambiguous" (p. 52). Although some research has shown that Wood et al.'s revision of this scale can register positive and negative changes in the evaluation of programs (Wylie, 1970), our research suggests that this measure as a measure of life satisfaction is less sensitive to such effects than measures of happiness. For example, Rosow (1977) has stated that "morale scales must systematically exclude all references to the past and focus solely on current factors" (p. 39). As Lawton (1977) has reported:

Morale and life satisfaction measures are heavily weighted with content that may reflect a lifelong outlook and thus may be resistant to change following a specific intervention. Theoretically, the Affect Balance Scale and other mood, symptom, and time-focused scales ought to be more sensitive. (p. 14)

The negative correlation of VA activity with the Cantril Ladder was surprising. Perhaps the fact that respondents were asked to rate their

current life situation in relation to their own perceptions of their worst and best possible life could have played some part in this finding.

Perhaps persons more active in VA's have higher expectations for the "best possible life" than less active persons. The Cantril Ladder is not exactly a measure of satisfaction with life, although it has been used as such. Cantril (1965) reports a correlation of .36 between this measure and a self-anchoring ladder measure of "Where would you put yourself on the ladder . . . in terms of how satisfied or dissatisfied you are with your own personal life?" This correlation is somewhat less than the correlations in the .4 to .5 range between reports of satisfaction and happiness found by Robinson and Shaver (1969). In addition, the Cantril Ladder seems to depend more on a basically intellectual process than other measures, whereas the Bradburn measure is more affective (Campbell, 1976). In any case, the Bradburn Affect Balance Scale seems to be the most sensitive measure of the effects of VA activity.

Not only are these measures differentially sensitive to the effects of VA activity, but also they are differentially sensitive to the effects of other variables. The Bradburn scale seems to be more sensitive to the effects of health, whereas Wood et al.'s LSI-Z seems more sensitive to the effects of income. Wood et al.'s scale seems less sensitive to SOCDES, whereas BRADHAP is significantly related, and CANTRIL is strongly related to SOCDES. These differential findings reinforce our conclusion that the scales seem to be tapping different constructs.

Besides the differential correlations of the psychological well-being measures, our two measures of VA activity also indicate differential effects. In every case, the Chapin scale correlates more strongly with well-being than does the average number of meetings attended per month. Past research has used one or the other or a combination of these measures--e.g., the Chapin scale was used by Edwards and Klemmack (1973), whereas a measure of frequency of attendance was used by Graney (1975) and Palmore and Luikart (1972), and a combination of such measures by Bull and Aucoin (1975). Our findings suggest that the Chapin scale seems preferable to measures of mere membership and to measures of meeting attendance. We believe that the Chapin scale is more sensitive because it taps more effectively the quality of the membership. The Chapin scale also appears to be less affected by social desirability.

Both CHAPIN and MEETINGS are related to education, reaching significance in the case of CHAPIN. MEETINGS, however, seems more related to income than to education (.299 as compared to .041). These findings support the past research (i.e., Agger, Goldrich, & Swanson, 1964). The effects of health on each measure are relatively slight. This finding is probably due to our relatively healthy sample, since past research has shown that health is related significantly to VA activity (e.g., Ward, 1979).

As for our measures of VA satisfaction, the question regarding

how satisfied one was with particular VA's (TOTSATIS) appears to be a better measure of VA satisfaction than the TOTWANTS measure, which assesses the respondents' degree of satisfaction of wants from VA's. The TOTWANTS measure is surprisingly unrelated or related slightly negatively to psychological well-being, even though there is a significant positive correlation between this measure of satisfaction and TOTSATIS. In addition, none of our exogenous variables correlate well with TOTWANTS. Conceptually, this approach to the measurement of satisfaction makes sense (see Ward, 1979); why it fails to act as we expected is a question for future research. We can speculate that perhaps the lists of "wants" from membership that we asked respondents to choose from is not psychologically involving; that is, even though respondents, generally had no trouble picking three items from this list, it may be that the list items were not ones which respondents really considered important. Thus, even though TOTSATIS is more highly correlated with social desirability than is TOTWANTS, TOTSATIS seems to be the better measure of VA satisfaction.

Our tables reveal that social desirability is significantly correlated with both measures of VA satisfaction and with psychological well-being. This finding reinforces the concern about social desirability bias in surveys of the aged. For example, Lawton (1977) has said:

Today's older generation is more subject to the general tendency to deny negative states or feelings than are younger people. . . . Without exception, every [well-being] measure . . . depends on the respondents' willingness to state his "real" feelings. (p. 13)

Sherwood (1977) has reported that social desirability "concerns become less problematic, however, if it is possible to measure the effect of the biases" (p. 36). In order to assess the overall impact of social desirability on our measures of psychological well-being, we chose two models which seemed to be most affected by social desirability--viz., the CHAPIN, TOTSATIS, and BRADHAP model and the CHAPIN, TOTSATIS, and CANTRIL model. We entered all predictor variables except social desirability in the first stage of multiple regression and, then, in the second stage, added social desirability. In both models, the increment to R^2 due to social desirability was 4% (out of the total R^2 of 41% and 15% respectively). Thus, although we recognize that such measures contain some social desirability bias, these measures do tap other concepts and, therefore, are useful in making meaningful distinctions among people on the constructs we are measuring.

Relationships Between Variables

As evident from our decomposition of the BRADHAP, CHAPIN, and TOTSATIS model, the effects of our variables tend to be direct rather than indirect. We could find little evidence, for instance, that income affected BRADHAP through CHAPIN or TOTSATIS; rather, income has a strong direct effect on BRADHAP. Interestingly, even though our sample tended to be in relatively good health, this self-perceived health variable was strongly and directly related to BRADHAP.

One consistent and unexpected finding was a negative relationship between VA activity and VA satisfaction. One possible explanation for this finding is the fact that the more educated are both more active and are less satisfied with the VA's they belong to (Table 16). Their reporting less satisfaction could be because they have less social desirability bias or because they have higher expectations and, therefore, are more critical of the VA's. A second possible explanation for this finding is that people who are more active will have higher expectations about the returns they should receive and, therefore, have lower satisfaction both for the quality of the VA itself and for their own need satisfaction. Rose (1960) has reported that "a few members, usually the leaders, have a sense of primary responsibility for the association and are willing to carry on their activity in it sometimes at a real sacrifice" (p. 688). Also, perhaps people who are more active in VA's become more aware of the VA's faults and shortcomings than people who attend occasionally and are not involved with or aware of conflict/controversies/ and internal problems.

In support of our finding that more highly educated people seem less satisfied with their VA activities, Zarit (1975) found that those who dropped out of a senior day-care center were more highly educated than those who remained. Perhaps more highly educated people think they have less in common with most of the participants in such programs (Hanssen, Meima, Buckspan, Henderson, Helbig, & Zarit, 1978). The

content of these activity programs may be at variance with the self-image of highly educated people--who probably had supervisory and/or leadership roles in their work and were used to functioning at "high cognitive levels." Meanwhile, programs such as at senior centers or in Golden Age clubs necessarily must gear their content toward less-educated people; perhaps, then, the more highly educated person may think such programs are an insult to his/her intelligence. Further study will have to determine the causes of this dissatisfaction.

Another unexpected finding was the negative relationship between social desirability and our other exogenous variables. We hypothesized positive relationships as reported by Mutran and Burke (1979). However, Mutran and Burke utilized Schuessler, Hittle, and Cardascia's (1978) scale of social desirability instead of the Marlowe-Crowne scale, which we used. Research with the Marlowe-Crowne scale has shown negative relationships between social desirability and SES (Klassan, Honstra, & Anderson, 1975; Wall, 1972), although we could find no research on health and social desirability as measured by the Marlowe-Crowne scale. The negative relationships could be due to lower SES and sicker persons having a greater need to appear more socially desirable because of their less desirable circumstances.

We also found it surprising that education was negatively related to BRADHAP. There is evidence, though, that those with incomes of \$7,000 or above have a low negative correlation between education and life

satisfaction (Bradburn & Caplovitz, 1965; Palmore & Luikart, 1972). Palmore and Luikart suggest that their findings could be due to greater discrepancy between ideal and actual levels of achievement, more unrealistic expectations, or more cynicism. Possibly people of higher education may have received more psychological satisfaction from their work and retirement hits them harder.

As for the effects of a mere activity approach versus an approach which takes in quality of the relationship, our findings are somewhat inconclusive. With the BRADHAP measure, CHAPIN has over twice the impact of TOTSATIS. However, with the WOODLS measure, the effects are approximately equal. This finding suggests that although quality should be taken into account (as postulated by Campbell et al., 1976), objective participation does appear to provide some benefits and in some cases, objective participation appears to be more important than the respondents' subjective evaluation of that participation. Perhaps it is not participation in any specific activity that is important, but rather participation in general is beneficial--taking an active part of life--rather than sitting around waiting to die or taking on the sick role (cf. Palmore & Luikart, 1972). Ingersoll and Silverman (1978) tried two completely different methods of group therapy on older people and found that in both groups, the self-esteem of their clients increased. These researchers said that:

This finding suggests that the particular modality may not be as important as the fact that elderly clients avail themselves of some form of group therapy. The opportunity to interact freely with peers in a supportive environment may be a crucial element in strengthening the older person's coping abilities. (p. 206)

However, our findings do not suggest that older people will benefit from all types of activity. The studied groups were formulated with good intent and leaders and sponsors work hard to keep group members happy. But, if older people attended a group which required them to perform demeaning activities or treated them as children and made disparaging remarks about their ability to care for themselves--then we would not expect this activity to contribute to higher psychological well-being. That our sample members tended to be fairly satisfied with the VA's they belonged to is evident from the mean amount of reported satisfaction--3.4 out of a possible 4.0, even when one takes social desirability into account. People who are extremely dissatisfied will probably stop participating; all our members reported getting at least some satisfaction from the groups they belonged to. These findings support those of Hanssen et al. (1978), who studied senior-center participation. They found that even among people who no longer participated, these non-participants rarely had complaints about the program, but generally indicated that they were too busy or had health problems that precluded their participation. The researchers concluded that "It should . . . be emphasized that this study indicates that the senior center was providing services to current participants at a satisfactory level." As

in our sample, the respondents in their study were predominantly white and middle class.

Now that we have covered the findings of our research related to individual participation, we will move on to examine our findings related to VA characteristics.

Discussion of Characteristics Analyses

In general, we did find evidence that some characteristics of VA's can have differential effects, even if some of these effects were the opposite of what we expected. Particularly dramatic were the effects of the SIZE variable. Our research indicates that people who belong to larger groups are more satisfied with those groups and may be happier than members who belong to smaller groups. This finding is at variance with the belief that smaller groups would be "better" for older people since these groups more closely approximate primary relationships. (See Back, 1976, for a discussion of this belief.) However, previous research supports our finding; Langner and Michael (1963) found that people in large group activity have less risk for mental illness than those in small group activity. Their explanation was that:

Perhaps small groups are more emotionally demanding and hence disturbing. Perhaps large groups, particularly professional or fraternal groups, offer a certain subtle anonymity and protect the individual from disturbing emotional involvement and demands. At the same time they make him feel part of a large and important group or body. This package of status and "belongingness" without the demand for individual emotional output is perhaps what makes large group activity most conducive to mental health. (pp. 294-295)

Interestingly, as we expected, we found that people in large groups are significantly less active than people in small groups. Perhaps, though, as Streib (1976) has noted, the prestige of affiliation in large groups may persist for the older person even if she or he no longer participates actively.

Another possibility for why large group activity seems more satisfying than small group activity may be the way these groups are formed. Our observation is that small groups tend to be formed more often through already-established friendships (cf. Jacoby, 1966). However, in large groups, members have the opportunity of meeting more people and the potential of making more friends, rather than simply seeing the friends they already have. Further research will be needed to see which, if any, of these hypotheses explains our findings.

Another unexpected finding was that people who participate in age-graded VA's tend to be less happy than those who participate in non-age-graded VA's, even though there was a slight tendency for those who participate in age-graded VA's to be more satisfied with those groups. Our research indicates that there are negative relationships between INCOME and EDUC and AGEGRAD: high SES persons were less likely to be in age-graded VA's. Trela (1976) has reported that higher class individuals are more likely than those of the lower class to seek out and join groups that are designed exclusively for the aged. However, as he points out, this finding may be true because the acquisition of new

membership is voluntary and may reflect the greater affiliative tendency of the higher classes. Our findings support those of Kutner et al. (1956), who, after examining old people's choices about the type of social club they would prefer to join, noted that the needs for active social lives characteristic of high-status individuals are best satisfied by association with younger people in youthful activities; nearly three times more high- than low-status individuals said they would join a club of mostly young people. Klein, LeShan, and Furman (1965) reported that "in their discussions of happiness, the elderly talked about their need for involvement with people of other ages. They speak of the boredom and depression which result from being arbitrarily confined to their own age group" (p. 129). Many of the social programs for the elderly use 62 or 65 as the entrance to "old age" (Mutran & Burke, 1979). Perhaps, by participating in such a group (although the causal direction will have to be determined), older people come to identify themselves as "old," and research has shown that older people who maintain a middle-age identity have been found to be better adjusted and more satisfied than those who identify themselves as old (Havighurst & Albrecht, 1953). Certainly, though, this finding warrants further study.

Another unexpected finding is that although members of church-affiliated VA's are slightly more satisfied with those groups, they may be less happy than members of non-church-related groups. This finding is at variance with that of Cutler (1976), who found that membership in

church-related groups was more strongly related to psychological well-being than membership in non-church-related groups, even after health and SES were controlled. His findings support those of Edwards and Klemmack (1973). Cutler suggested that these results could be indicative of the more general relationship between religiosity and well-being in old age, or more importantly, could be due to the characteristics of church-affiliated groups, such as possibly greater age-homogeneity and greater member activity and involvement. One problem with the research of Cutler and of Edwards and Klemmack is that both confound the effects of "religious activity" and VA activity. In keeping with the literature on VA's, we excluded church membership and Sunday-school activity from our analysis. However, Cutler's research required respondents simply to report whether or not they "belonged to church-affiliated groups." One cannot be certain what type groups respondents construed to be "church-affiliated," but most certainly some respondents counted church membership itself. We could find no obvious characteristic differences between "church-related" VA's and non-church-related VA's. As for the possibility that church-related VA's are more "age-homogenous," we have just presented results which indicate that this characteristic may not be the blessing which Cutler thinks it is. Instead, we believe that Cutler's findings are due to the general relationship between religiosity and well-being (Blazer & Palmore, 1976). Certainly, though, these results suggest that more research is needed, especially in light of the

findings of Pratt (1972); he found that one's religious orientation (belief in transcendent versus immanent God, concern for self versus others, and so on) determines joining and activity in church-related groups, even though all the respondents in his study participated in the same formal religious denomination.

We are uncertain as to why participation in church-related VA's is associated with less happiness, even though members are slightly more satisfied with them, especially since we prefer not to delve into religious dogma and personal beliefs. Cutler (1976) found that people who belonged to church-related VA's attended religious services significantly more than people who did not belong to such groups. Perhaps these people have had negative life experiences which have increased their desire to participate in formal religion but meanwhile are causing them to be less happy. Again, further research is needed to determine the causes of our findings.

Finally, for the instrumental/expressive variable, our results do not conform to past research. Members of instrumental VA's seem slightly less satisfied and slightly less happy than members of expressive VA's. Perhaps these findings are due to the nature of instrumental VA's as opposed to expressive groups or perhaps they are the result of a blurring of individual versus group goals. Older people in instrumental groups perhaps contribute to instrumental causes indirectly--giving money, for instance, or selling items to make money for people they will

never see. On the other hand, perhaps members of expressive VA's-- even though the purpose of such groups is supposedly to benefit the members--do sometimes act "instrumentally" in their activities. For instance, if the group is supposedly engaged in making pin cushions for their own enjoyment, then at least one person may be making them as gifts. Or perhaps these findings do indicate that at least our middle- and upper-class sample has less desire to feel "useful," but may enjoy the chance for activity for its own sake and for their own enjoyment. Perhaps they feel "useful" through their other activities and appreciate the opportunity to do something solely for themselves. Again, more research is needed to determine the explanation of our findings.

In general, though, this research has indicated a need for more qualitative study of the characteristics of groups in particular.

CHAPTER V

SUMMARY AND CONCLUSIONS

In this chapter we will summarize the purposes, methods, and results of this research. Next we will discuss the limitations of this study and speculate about the most profitable areas for future research.

Synopsis of the Research

Freed from the necessity to continue to earn their living and with an increasing number of years of potential retirement, many older people are faced with the task of finding satisfying activities to occupy their added time. After all, few people relish living longer lives if this longevity simply means added years of loneliness and boredom. In recent decades, therefore, social scientists have been examining factors which relate to psychological well-being in the elderly. One possible use of leisure time by older persons is participation in voluntary associations. What, though, are the consequences of voluntary-association participation on the psychological well-being of older people? This dissertation examined past research on this topic and presented the results of a study examining theoretical and methodological issues related to it.

The review of the literature in this area revealed that due to the influence of activity theory, past research has ignored the study of qualitative factors, including satisfaction with voluntary associations and characteristics of voluntary associations. In addition, past research has relied upon simple correlational techniques or upon multiple regression and has utilized a variety of different measures. Thus, this study was undertaken to explore more qualitative factors in a path analytic approach and to examine the possibility that differential research findings were due to measurement artifact.

Subjects were 50 voluntary-associations members (26 males and 24 females) recruited from target groups in the Durham area. These target groups had initially been identified through lists obtained from the Durham Chamber of Commerce and the Coordinating Council of Senior Citizens. Subjects ranged in age from 61 to 90 and were predominantly white and middle-class.

Two general path models were examined in the research. The first model dealt with individual participation in voluntary associations; the second dealt with voluntary-association characteristics. Variables were chosen which were believed to be in keeping with past research. Three different measures of psychological well-being and two different measures of satisfaction with voluntary associations were used. In the second path model, the characteristics of voluntary associations which were examined were: size of the group, age-gradedness, church-

relatedness, and instrumental-expressiveness.

Results indicated that choice of measure does have differential effects. The Chapin measure of voluntary-association activity and the Bradburn measure of psychological well-being were significantly correlated. However, a measure of voluntary-association activity consisting of the average number of meetings attending per month was not significantly correlated with any measure of psychological well-being. In addition, the Chapin measure was not correlated significantly with any other well-being scale.

Also, characteristics of voluntary associations were shown to be important. People in larger groups were more satisfied with those groups and more happy in general. People in age-graded groups were slightly more satisfied with those groups but less happy in general. In addition, people in church-related groups were more satisfied with those groups but less happy. Finally, people in instrumental groups were slightly less satisfied with those groups and less happy than people in more expressive groups.

Discussion centered on the possible reasons for these findings. It was suggested that "psychological well-being" may be profitably divided into "life satisfaction" and "happiness," with "happiness" being the more sensitive measure of voluntary-association effects. Also, mere activity may have effects equal to or greater than the effects of satisfaction with voluntary associations. As for characteristics of voluntary associations,

it was suggested that people in larger groups may be protected from emotional demands, while at the same time feeling part of a prestigious group and/or having the opportunity to make more friends. People in non-age-graded groups may feel "younger" by having the opportunity to interact with people of all ages. People in church-related groups may join such groups because of negative life circumstances, which would be reflected in lower psychological well-being. It was suggested that past research findings of significant positive correlation between membership in church-related groups and well-being were due to the relationship between religiosity and well-being, rather than the characteristics of groups. Finally, for the instrumental-expressive findings, it was suggested that older people such as in this sample may not value "feeling useful" as much as has been thought.

Toward the Future

As with any research, our research has raised new questions for examination in the future. In particular, our research has indicated the need to examine more qualitative factors in the research on voluntary-association participation and psychological well-being, particularly characteristics of such groups. In addition, we also perceive the need to examine alternative measures of voluntary-association satisfaction, especially since our research has shown the import of choice of measures. Future research should concentrate on obtaining larger,

more diverse, and representative samples, since findings may depend upon the nature of the groups and the sample; studies with other populations in other parts of the country may yield different results. Also, future research should be done longitudinally, in order to assess changes over time in voluntary-association participation and satisfaction and their relationships to well-being.

Despite possible limitations in the generalizability of the findings of our study, we believe that we have made a significant step in furthering research in this area. We have demonstrated the utility of path analysis in such research, have established the import of measurement choice, and have isolated some factors which may contribute to and/or mediate the relationship between voluntary-association participation and psychological well-being. These findings are especially important in light of the fact that voluntary associations for the aged are becoming increasingly popular and are even being sponsored by governmental agencies. Although we believe that implementation of our findings to policy at this point would be premature, we do think that these findings will aid future research in this area and thus will eventually have policy import for generations of older people who are seeking their "Golden Age."

APPENDIX A

INTERVIEW INSTRUMENTS

Sex (SEX)	Race (RACE)
male _____	white _____
female _____	black _____

Marital Status (MARITAL)

What is your marital status?

1. Married and living with spouse
2. Married but spouse absent
3. Divorced or separated
4. Widowed
5. Never married

Work Status (WORK)

1. Employed full-time
2. Employed part-time
3. Retired
4. Never worked outside home

What is the highest grade of regular school or college you ever attended?
(EDUC) Coded in directly highest grade.

In which range was your last year's income from all sources? (INCOME)

Coded:

- | | |
|----------------------|---|
| 1. \$25,000 or more | 5 |
| 2. \$15,000-\$24,999 | 4 |
| 3. \$10,000-\$14,999 | 3 |
| 4. \$5,000-\$9,999 | 2 |
| 5. \$1,000-\$4,999 | 1 |
| 6. \$999.00 or less | 0 |

What is your age? (AGE) Coded directly in years.

Compared to others your age, would you say your health is: (HEALTH)

Coded:

- | | |
|--------------|---|
| 1. Excellent | 3 |
| 2. Good | 2 |
| 3. Fair | 1 |
| 4. Poor | 0 |

Social Desirability (SOCDES)

I will read you a number of statements concerning personal attitudes and traits. Please listen to each item and decide whether the statement is true or false as it pertains to you personally.

1. Before voting I thoroughly investigate the qualifications of all the candidates.
2. I can remember "playing sick" to get out of something.
3. There have been times when I was quite jealous of the good fortune of others.
4. I have almost never felt the urge to tell someone off.
5. At times I have really insisted on having things my own way.
6. I am always courteous, even to people who are disagreeable.
7. My table manners at home are as good as when I eat out in a restaurant.
8. I am sometimes irritated by people who ask favors of me.
9. On occasion I have had doubts about my ability to succeed in life.
10. I have never felt that I was punished without cause.

Coded "1" for socially desirable answer, "0" for other.

Life SatisfactionWood et al.'s Scale (WOODLS)

Now I'm going to read some statements. Please respond true or false to each one, as they apply to you.

1. As I grow older, things seem better than I thought they would be.
- *2. I have gotten more of the breaks in life than most of the people I know.
3. This is the dreariest time of my life.
4. I am just as happy as when I was younger.
5. These are the best years of my life.
6. Most of the things I do are boring or monotonous.
7. The things I do are as interesting to me as they ever were.
- *8. As I look back on my life, I am fairly well satisfied.
9. I have made plans for things I'll be doing a month or a year from now.
- *10. When I think back over my life, I didn't get most of the important things I wanted.
11. Compared to other people, I get down in the dumps too often.
- *12. I've gotten pretty much what I expected out of life.
13. In spite of what people say, the lot of the average man (or woman) is getting worse, not better.

* These items were omitted in calculating our RWOODLS measure.
Coded "1" for "good" answer, "0" for other.

Bradburn's Happiness Scale (BRADHAP)

Now I'm going to read some questions for you to answer. How many times during the past few weeks did you feel:

Positive Affect

1. Pleased about having accomplished something?
2. That things were going your way?
3. Proud because someone complimented you on something you had done?
4. Particularly excited or interested in something?
5. On top of the world?

Negative Affect

- | | | |
|---|---------------|---|
| 6. So restless that you couldn't sit long in a chair? | | |
| 7. Bored? | Coded | |
| 8. Depressed? | None | 0 |
| 9. Very lonely or remote from other people? | Once | 1 |
| 10. Upset because someone criticized you? | Several times | 2 |

Coded: (Positive minus negative) plus 11 (to insure positive values).

Cantril Ladder (CANTRIL)

All of us want certain things out of life. Thinking about what really matters in your life, what are your wishes and hopes for your future? In other words, if you imagine your future in the best possible light, what would the happiest life for you be like? (Probes: What are your hopes for your future? Anything else?)

On the other hand now, what are your fears and worries about your future? In other words, if you imagine your future in the worst possible light, what would the most unhappy life for you be like? (Probes: What are your fears about your future? Anything else?)

Here is a picture of a ladder. Suppose we say that the top of the ladder (pointing) represents the best possible life for you and the bottom (pointing) of the ladder represents the worst possible life for you. Where on the ladder (moving finger up and down ladder) do you feel you stand at the present time?

9
8
7
6
5
4
3
2
1
0

Coded: directly by number

Information About VA Memberships

Here is a list of various kinds of groups and organizations. You may want to look it over when I ask the next couple of questions.

- Fraternal groups
- Service clubs
- Veterans groups
- Political groups
- Labor unions
- Sports groups
- Youth groups
- School service groups
- Hobby or garden clubs
- School fraternities or sororities
- Nationality groups
- Farm organizations
- Literary, art, discussion, or study groups
- Professional or academic societies
- Church-affiliated groups
- Other groups

Were you a member of any groups or organizations when you were 50 years old?

How many groups or organizations were you a member of when you were 50 years old? (JOINER)

What groups or organizations are you a member of now? For each club mentioned:

1. How long have you been a member of this group?
2. Do you make financial contributions to this group?
3. Are you an officer in the group?
If yes, then what office do you hold?
4. Are you a member of any committees in this group?
5. In general, how satisfied are you with this group?

Not at
all

Completely

0 1 2 3 4

Coded: "0," "1," "2," "3," or "4"

Does this club or organization have a local chapter?

If yes, then:

How often does it meet?

How often do you usually attend?

How many members does this group have?

How many attend an average meeting?

What age people are in this group?

What type activities do you take part in in this group?

Choose 3 statements from this list which best describe what you want from this group:

To be with friends

To make new friends

To give me new experiences

To make time pass

To do things that will be of benefit to society

To help other people

To give me a chance to achieve something

To give me a welcome change from my work

To help me financially

To give me a feeling of respect for myself

To make me popular with other people

Another reason _____

For each reason:

To what extent are you able to _____ by being a member of this group?

0	1	2
Little	Some	Much

Coded: "0," "1," or "2"

APPENDIX B

SUPPLEMENTARY TABLES

Table 1

Overall Correlation Matrix of Variables Used in Individual Path Analyses

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. INCOME	1.000	.503*	.040	-.242	.192	.397*	-.120	-.074	.237	.278*	.193	-.010	.022	.215
2. EDUC		1.000	-.008	-.086	.344*	.406*	-.313*	-.091	.081	.106	.037	-.016	-.189	.358*
3. HEALTH			1.000	-.090	.061	.054	.054	-.030	.351*	.236	.235	.067	.038	.080
4. SOCDES				1.000	.026	.064	.340*	.072	.224	.085	.110	.272	.167	-.001
5. CHAPIN					1.000	.551*	-.445*	-.168	.379*	.161	.118	-.166	-.223	.737*
6. MEETINGS						1.000	-.190	-.010	.297*	.150	.108	-.061	-.104	.286*
7. TOTSATIS							1.000	.437*	.111	.127	.182	.299	.640*	-.358*
8. TOTWANTS								1.000	.020	-.110	-.040	-.057	.296*	-.048
9. BRADHAP									1.000	.437*	.386*	.353*	.180	.360*
10. WOODLS										1.000	.892*	.368*	.369*	.196
11. RWOODLS											1.000	.401*	.359*	.180
12. CANTRIL												1.000	.255	-.217
13. ACSATIS													1.000	-.140
14. ACTIVE														1.000

*Significant at .05 level or less, using two-tailed *t* tests.

Table 2

Ranges, Means, Standard Deviations, and Scoring Key
for Major Variables, Characteristics Analyses

Variables	Potential range	Observed range	Mean	Standard deviation	Scoring key
HEALTH	0-3	0-3	2.04	.76	Hi = better health
INCOME	0-5	1-5	4.08	1.22	Hi = more income
EDUC	0- 2	6-19	13.65	2.85	Hi = more education
SOCDES	0-10	3-9	6.40	1.55	Hi = greater social desirability
SIZE	2- 2	4-649	105.23	138.67	Hi = larger group
AGEGRAD	0-1	0-1	.64	.48	Hi = age-graded
EXPIN	0-2	0-2	.75	.58	Hi = more instrumental
CHURCH	0-1	0-1	.26	.44	Hi = church-related
SCHAPIN	1-15	1-15	7.24	3.08	Hi = greater activity
SISATIS	0-4	1-4	3.30	.90	Hi = greater satisfaction
BRADHAP	0-21	5-21	16.45	3.33	Hi = greater happiness

Table 3

Overall Correlation Matrix for Characteristics Models

	1	2	3	4	5	6	7	8	9	10	11
1. HEALTH	1.000	-.031	-.078	-.078	-.054	.055	-.086	-.077	-.028	.048	.383*
2. INCOME	1.000	1.000	.383*	-.233*	.189*	-.274*	-.123	.109	.120	-.051	.179*
3. EDUC			1.000	-.128	-.022	-.272*	-.207*	.278*	.194*	-.272*	-.080
4. SOCDES				1.000	.030	-.025	-.043	.008	-.033	.366*	.183*
5. SIZE					1.000	-.419*	-.236*	.017	-.179*	.168*	.216*
6. AGEGRAD						1.000	.084	-.371*	.012	.087	-.124
7. CHURCH							1.000	-.139	-.079	.045	-.158*
8. EXPIN								1.000	.168*	-.146	-.023
9. SCHAPIN									1.000	-.086	.057
10. SISATIS										1.000	.202*
11. BRADHAP											1.000

*Significant at .05 level or less, using two-tailed t tests.

REFERENCE NOTES

1. Pratt, L. P., Jr. The religious life styles of the members of two North Carolina Baptist churches. Unpublished doctoral dissertation, Department of Religion, Duke University, 1972.
2. Starling, D. Voluntary-association membership and psychological well-being in the elderly: Towards the resolution of some theoretical and methodological concerns. Unpublished major area paper, Department of Psychology, Duke University, 1979.

REFERENCES

- Adams, D. L. Analysis of a life satisfaction index. Journal of Gerontology, 1969, 24, 470-474.
- Adams, D. Correlates of satisfaction among the elderly. The Gerontologist, 1971, 11, 64-68.
- Agger, R. E., Goldrich, D., & Swanson, B. E. The rules and the ruled: Political power and impotence in American communities. New York: Wiley, 1964.
- Allport, G. W. The trend in motivational theory. American Journal of Orthopsychiatry, 1953, 23, 107-119.
- Alwin, D. F., & Hauser, R. M. The decomposition of effects in path analysis. American Sociological Review, 1975, 40, 37-47.
- Andrews, F. M., & Withey, S. B. Social indicators of well-being. New York: Plenum Press, 1976.
- Arthur, J. K. How to help older people: A guide for you and your family. Philadelphia: J. B. Lippincott Company, 1954.
- Atchley, R. C. The social forces in later life. Belmont, California: Wadsworth Publishing Company, Inc., 1972.
- Babchuk, N., & Booth, A. Voluntary association membership: A longitudinal analysis. American Sociological Review, 1969, 34, 31-45.
- Babchuk, N., & Booth, A. Voluntary association membership: A longitudinal analysis. In J. N. Edwards & A. Booth (Eds.), Social participation in urban society. Cambridge, Mass.: Schenkman Publishing Company, Inc., 1973.
- Babchuk, N., Peters, G. R., Hoyt, D. R., & Kaiser, M. A. The voluntary associations of the aged. Journal of Gerontology, 1979, 34, 579-587.

- Back, K. W. Personal characteristics and social behavior: Theory and method. In R. H. Binstock & E. Shanas (Eds.), Handbook of aging and the social sciences (Vol. 3). New York: Van Nostrand Reinhold Company, 1976.
- Beal, G. M. Additional hypotheses in participation research. Rural Sociology, 1956, 21, 249-256.
- Bengtson, V., Chiriboga, D., & Keller, A. Occupational differences in retirement: Patterns of role activity and life outlook among Chicago teachers and steelworkers. In R. J. Havighurst (Ed.), Adjustment to retirement: A cross-national study. Assen, Netherlands: Van Gorcum, 1969.
- Beyer, G. H., & Woods, M. E. Living and activity patterns of the aged (Research Report No. 6). Ithaca, New York: Center for Housing and Environmental Studies, Cornell University, 1963.
- Bild, B., & Havighurst, R. Senior citizens in great cities: The case of Chicago. Gerontologist, 1976, 16, Part 2.
- Blazer, D., & Palmore, E. Religion and aging in a longitudinal panel. Gerontologist, 1976, 16, 82-85.
- Blenkner, M. Comments on chapters eight and nine. In R. Kleemeier (Ed.), Aging and leisure-- A research perspective into the meaningful use of time. New York: Oxford University Press, 1961.
- Bley, N., Goodman, M., Dye, D., & Harel, B. Characteristics of aged participants and nonparticipants in age-segregated leisure program. The Gerontologist, 1972, 12, 368-370.
- Borgatta, E. F., & Bales, R. F. Interaction of individuals in reconstituted groups. Sociometry, 1953, 16, 302-320.
- Bortner, R. W. Personality and social psychology in the study of the aging. In Psychological aspects of aging: A prospectus for research in the Veterans Administration. Study Group on the Psychological Aspects of Aging, May 15, 1966.
- Bradburn, N. M. The structure of psychological well-being. Chicago: Aldine Publishing Company, 1969.
- Bradburn, N. M., & Caplovitz, D. Reports on happiness. Chicago: Aldine Publishing Company, 1965.

- Brown, A. S. Satisfying relationships for the elderly and their patterns of disengagement. The Gerontologist, 1974, 14, 258-262.
- Bucke, M. Leisure-time activities of elderly people in the United Kingdom. In J. Kaplan & G. J. Aldridge (Eds.), Social welfare of the aging. New York: Columbia University Press, 1962.
- Buhler, C. Meaningful living in the mature years. In R. W. Kleemeier (Ed.), Aging and leisure. New York: Oxford University Press, 1961.
- Bull, C. N., & Aucoin, J. B. Voluntary association participation and life satisfaction: A replication note. Journal of Gerontology, 1975, 30, 73-76.
- Burgess, E. W. Social relations, activities, and personal adjustment. American Journal of Sociology, 1954, 59, 352-360.
- Burnside, I. M. Mental health in the aged: The nurse's perspective. In R. H. Davis (Ed.), Aging: Prospects and issues. University of Southern California: The University of California Press, 1973.
- Butler, R. N. Psychiatry and the elderly: An overview. The American Journal of Psychiatry, 1975, 132, 893-900.
- Cameron, P. The generation gap: Which generation is believed to have the most fun and happiness and how do the generations rate themselves on desire for fun and happiness? The Gerontologist, 1972, 12, 120-123.
- Campbell, A. Subjective measures of well-being. American Psychologist, 1976, 31, 117-124.
- Campbell, A., Converse, P. E., & Rodgers, W. L. The quality of American life. New York: Russell Sage Foundation, 1976.
- Campbell, D. T., & Stanley, J. C. Experimental and quasi-experimental designs for research. Chicago: Rand McNally, 1963.
- Cantril, H. The pattern of human concerns. New Brunswick, New Jersey: Rutgers University Press, 1965.
- Carp, F. M. Morale: What questions are we asking of whom? In C. N. Nydegger (Ed.), Measuring morale: A guide to effective assessment. Washington, D. C.: The Gerontological Society, 1977.

- Cartwright, D. The nature of group cohesiveness. In D. Cartwright & A. Zander (Eds.), Group dynamics: Research and theory (3rd ed.). New York: Harper and Row, Inc., 1968.
- Cartwright, D. Achieving change in people: Some applications of group dynamics theory. In E. P. Hollander & R. G. Hunt (Eds.), Classic contributions to social psychology. New York: Oxford University Press, 1972.
- Cavan, R. S., Burgess, E. W., Havighurst, R. J., & Goldhamer, H. Personal adjustment in old age. Chicago: Science Research Associates, 1949.
- Champion, D. J. The sociology of organizations. New York: McGraw-Hill, 1975.
- Chapin, F. S. Experimental designs in sociological research. New York: Harper and Brothers, 1947.
- Clemente, F., Rexroad, P. A., & Hirsch, C. The participation of the Black aged in voluntary associations. Journal of Gerontology, 1975, 30, 469-472.
- Conner, K. A., Powers, E. A., & Bultena, G. L. Social interaction and life satisfaction: An empirical assessment of late-life patterns. Journal of Gerontology, 1979, 34, 116-121.
- Cook, S. W., & Selltiz, C. A multiple-indicator approach to attitude measurement. Psychological Bulletin, 1964, 62, 36-55.
- Crosbie, P. V. Interaction in small groups. New York: Macmillan Publishing Company, Inc., 1975.
- Crowne, D. P., & Marlowe, D. The approval motive: Studies in evaluation dependence. New York: John Wiley and Sons, 1964.
- Cumming, E., & Henry, W. E. Growing old. New York: Basic Books, Inc., 1961.
- Cutler, N. E. Age variations in the dimensionality of life satisfaction. Journal of Gerontology, 1979, 34, 573-578.
- Cutler, S. J. Voluntary association participation and life satisfaction: A cautionary research note. Journal of Gerontology, 1973, 28, 96-100.

- Cutler, S. J. Membership in different types of voluntary associations and psychological well-being. The Gerontologist, 1976, 16, 335-339.
- Dawe, H. C. The influence of the size of kindergarten group upon performance. Child Development, 1934, 5, 295-303.
- deGrazia, S. Of time, work, and leisure. Garden City, New York: Doubleday and Company, Inc., 1962.
- Dickoff, H., & Lakin, M. Patient's view of group psychotherapy. International Journal of Group Psychotherapy, 1964, 14, 61-73.
- Downing, J. Factors affecting the selective use of a social club for the aged. Journal of Gerontology, 1957, 12, 81-84.
- Dumazedier, J. Toward a society of leisure. New York: Free Press, 1967.
- Duncan, O. D. Path analysis: Sociological examples. American Journal of Sociology, 1966, 72, 1-16.
- Edwards, J. N., & Booth, A. Social participation in urban society. Cambridge, Mass.: Schenkman Publishing Company, Inc., 1973.
- Edwards, J. N., & Klemmack, D. L. Correlates of life satisfaction: A re-examination. Journal of Gerontology, 1973, 28, 497-502.
- Festinger, L. Architecture and membership. Journal of Social Issues, 1951, 7, 152-163.
- Folsom, J. K., & Morgan, C. M. Social adjustment of 381 recipients of old age allowances. American Sociological Review, 1937, 2, 223-229.
- Forcese, D. P., & Richer, S. Social research methods. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973.
- George, L. K., & Bearon, L. B. The meaning and measurement of quality of life in older persons: A manual for gerontological researchers and practitioners. Durham, North Carolina: Center for the Study of Aging and Human Development, Duke University, 1979.
- Graney, M. J. Happiness and social participation in aging. Journal of Gerontology, 1975, 30, 701-706.

- Gubrium, J. F. The myth of the golden years: A socio-environmental theory of aging. Springfield, Illinois: Charles C. Thomas, 1973.
- Hanssen, A. M., Meima, N. J., Buckspan, L. M., Henderson, B. E., Helbig, T. L., & Zarit, S. H. Correlates of senior center participation. The Gerontologist, 1978, 18, 193-199.
- Harris, J. E., & Bodden, J. L. An activity group experience for disengaged elderly persons. Journal of Counseling Psychology, 1978, 25, 325-330.
- Hartson, L. D. The psychology of the club. The Pedagogical Seminary, 1911, 18, 353-414.
- Hausknecht, M. The joiners: A sociological description of voluntary association membership in the United States. New York: Bedminster Press, 1962.
- Havighurst, R. The social competence of middle aged people. Genetic Psychology Monographs, 1957, 56, 297-375.
- Havighurst, R. J. A social-psychological perspective on aging. The Gerontologist, 1968, 8, 67-71.
- Havighurst, R. J., & Albrecht, R. Older people. New York: Longmans, Green, and Company, 1953.
- Henderson, C. R. The place and functions of voluntary associations. American Journal of Sociology, 1895, 1, 327-334.
- Hendricks, J., & Hendricks, C. D. Aging in mass society. Cambridge, Mass.: Winthrop Publishers, Inc., 1977.
- Heslin, R., & Dunphy, D. Three dimensions of member satisfaction in small groups. Human Relations, 1964, 17, 99-112.
- Homans, G. C. The human group. New York: Harcourt, Brace, and Company, 1950.
- Hughes, E. C. The sociological study of work. American Journal of Sociology, 1952, 57, 423-426.
- Ingersoll, B., & Silverman, A. Comparative group psychotherapy for the aged. The Gerontologist, 1978, 18, 201-206.

- Jacoby, A. P. Personal influence and primary relationships: Their effect on associational membership. Sociological Quarterly, 1966, 7, 76-84.
- Jacoby, A. P., & Babchuk, N. Instrumental and expressive VA's. Sociology and Social Research, 1963, 47, 461-471.
- Jahoda, M. Current concepts of positive mental health. New York: Basic Books, 1958.
- Johnson, M. Voluntary affiliation: Changing age patterns? American Sociological Association: Annual Proceedings, 1975, 209-210. (Abstract)
- Kaplan, A. The conduct of inquiry: Methodology for behavioral science. New York: Chandler Publishing, 1964.
- Kaplan, J. Voluntary organizations. In A. M. Hoffman (Ed.), The daily needs and interests of older people. Springfield, Illinois: Charles Thomas, 1970.
- Kaplan, M. The uses of leisure. In C. Tibbitts (Ed.), Handbook of social gerontology: Societal aspects of aging. Chicago: The University of Chicago Press, 1960.
- Kaplan, M. Leisure: Theory and policy. New York: Wiley, 1975.
- Kart, C. S., & Manard, B. B. Aging in America: Readings in social gerontology. Port Washington, N. Y.: Alfred Publishing Company, 1976.
- Katz, D., Maccoby, N., & Morse, N. C. Productivity, supervision, and morale in an office situation. Ann Arbor: Survey Research Center, The University of Michigan, 1951.
- Klassen, D., Honstra, R. K., & Anderson, P. B. Influence of social desirability on symptom and mood reporting in a community survey. Journal of Consulting and Clinical Psychology, 1975, 43, 448-452.
- Klein, W. H., LeShan, E. J., & Furman, S. S. Promoting mental health of older people through group methods: A practical guide. New York: Mental Health Materials Center, Inc., 1965.
- Kuhlen, R. G. Needs, perceived need satisfaction opportunities, and satisfaction with occupation. Journal of Applied Psychology, 1963, 47, 56-64.

- Kutner, B., Fanshel, D., Togo, A. M., & Langner, T. S. Five hundred over sixty: A community survey on aging. New York: Russell Sage Foundation, 1956.
- Langner, T. S., & Michael, S. F. Life stress and mental health: The midtown Manhattan study (Vol. 2). London: The Free Press of Glencoe, 1963.
- Larson, R. Thirty years of research on the subjective well-being of older Americans. Journal of Gerontology, 1978, 33, 109-125.
- Lawton, M. P. Morale: What are we measuring? In C. N. Nydegger (Ed.), Symposium on measuring morale: A guide to effective assessment. Washington, D. C.: Gerontological Society, 1977.
- Lemon, B. W., Bengtson, V. L., & Peterson, J. A. An exploration of the activity theory of aging: Activity types and life satisfaction among in-movers to a retirement community. Journal of Gerontology, 1972, 27, 511-523.
- Lohmann, N. Correlations of life satisfaction, morale, and adjustment measures. Journal of Gerontology, 1977, 32, 73-75.
- Lowenthal, M. F. The relationship between social factors and mental health in the aged. In A. Simon & L. I. Epstein (Eds.), Aging in modern society. Washington, D. C.: American Psychological Association, February, 1968. (Psychiatric Report No. 23)
- Lowenthal, M. F., & Haven, C. Interaction and adaptation: Intimacy as a critical variable. American Sociological Review, 1968, 33, 20-30.
- Lowy, L. Roadblocks in group work practice with older people: A framework for analysis. The Gerontologist, 1967, 7, 109-113.
- Maddox, G. L. Disengagement theory: A critical evaluation. The Gerontologist, 1964, 4, 80-82.
- Maddox, G. L. Selected methodological issues. In E. Palmore (Ed.), Normal aging. Durham, N. C.: Duke University Press, 1970.
- Maddox, G., & Douglass, E. B. Self-assessment of health. In E. Palmore (Ed.), Normal aging II. Durham, N. C.: Duke University Press, 1974.

- Markides, K. S., & Martin, H. W. A causal model of life satisfaction among the elderly. Journal of Gerontology, 1979, 34, 86-93.
- Maxwell, J. M. Standards for centers and clubs for older people. In J. Kaplan & G. J. Aldridge (Eds.), Social welfare of the aging. New York: Columbia University Press, 1962.
- Medley, M. L. Satisfaction with life among persons sixty-five years and older: A causal model. Journal of Gerontology, 1976, 31, 448-455.
- Moriwaki, S. Y. The affect balance scale: A validity study with aged samples. Journal of Gerontology, 1974, 29, 73-78.
- Morse, N. C., & Reimer, E. The experimental change of a major organizational variable. Journal of Abnormal and Social Psychology, 1956, 52, 120-129.
- Mutran, E., & Burke, P. J. Personalism as a component of old age identity. Research on Aging, 1979, 1, 38-63.
- Neugarten, B. L. The future and the young-old. Gerontologist, 1975, 15, 4-9.
- Neugarten, B. L., Havighurst, R. J., & Tobin, S. S. The measurement of life satisfaction. Journal of Gerontology, 1961, 16, 134-143.
- Nisbett, R. E., & Wilson, T. D. Telling more than we can know: Verbal reports on mental processes. Psychological Review, 1977, 84, 231-259.
- Nydegger, C. N. (Ed.) Symposium on measuring morale: A guide to effective assessment. Washington, D. C.: Gerontological Society, 1977.
- Orum, A. M. A reappraisal of the social and political participation of Negroes. American Journal of Sociology, 1966, 72, 32-46.
- Osborn, H. Some factors of resistance which affect group participation. In C. G. Kemp (Ed.), Perspectives on the group process. Boston: Houghton Mifflin Company, 1964.
- Palmore, E. The honorable elders. Durham, N. C.: Duke University Press, 1975.
- Palmore, E. Predictors of successful aging. The Gerontologist, 1979, 19, 427-431.

- Palmore, E., & Jeffers, F. Prediction of life span. Lexington, Mass: D. C. Heath Company, 1971.
- Palmore, E., & Luikart, C. Health and social factors related to life satisfaction. Journal of Health and Social Behavior, 1972, 13, 68-80.
- Pheysey, D. C., & Payne, R. L. The Hemphill Group Dimensions Description Questionnaire: A British industrial application. Human Relations, 1970, 23, 473-497.
- Pihlblad, C. T., & McNamara, R. L. Social adjustment of elderly people in three small towns. In A. M. Rose & W. A. Peterson (Eds.), Older people and their social world. Philadelphia: F. A. Davis Company, 1965.
- Pollak, O. Social adjustment in old age: A research planning report, Bulletin 59. New York: Social Science Research Council, 1948.
- Rapoport, R., & Rapoport, R. Leisure in the family life cycle. London: Routledge and Kegan Paul, 1975.
- Riley, M. W., & Foner, A. Aging and society: An inventory of research findings. New York: Russell Sage Foundation, 1968.
- Robinson, J., & Shaver, P. Measures of social psychological attitudes. Ann Arbor: Survey Research Center, the University of Michigan, 1969.
- Rose, A. The impact of aging on voluntary associations. In C. Tibbitts (Ed.), Handbook of social gerontology. Chicago: The University of Chicago Press, 1960.
- Rose, A. M. Future developments in aging-- Perspectives. In A. D. Hoffman (Ed.), The daily needs and interests of older people. Springfield, Illinois: Charles C. Thomas, 1970.
- Rosow, I. Social integration of the aged. New York: The Free Press, 1967.
- Rosow, I. Morale: Concept and measurement. In C. N. Nydegger (Ed.), Measuring morale: A guide to effective assessment. Washington, D. C.: The Gerontological Society, 1977.
- Ross, I. C., & Zander, A. Need satisfactions and employee turnover. Personnel Psychology, 1957, 10, 327-338.

- Schachter, S. The psychology of affiliation. Stanford, California: Stanford University Press, 1959.
- Schmidt, A. J. Oligarchy in fraternal organizations: A study in organizational leadership. Detroit: Gale Research Company, 1973.
- Schuessler, K., Hittle, D., & Cardascia, J. Measuring responding desirably with attitude-opinion items. Social Psychology, 1978, 41, 224-234.
- Schwartz, A. N., & Peterson, J. A. Introduction to gerontology. New York: Holt, Rinehart, and Winston, 1979.
- Scott, J. C., Jr. Membership and participation in voluntary associations. American Sociological Review, 1957, 22, 315-326.
- Secord, P. F., Backman, C. W., & Slavitt, D. R. Understanding social life: An introduction to social psychology. New York: McGraw-Hill Book Company, 1976.
- Sherwood, S. The problems and value of morale measurement. In C. N. Nydegger (Ed.), Measuring morale: A guide to effective assessment. Washington, D. C.: Gerontological Society, 1977.
- Silverman, P. R., MacKenzie, D., Pettipas, M., & Wilson, E. Helping each other in widowhood. New York: Health Sciences Publishing Corporation, 1974.
- Simon, J. L. Basic research methods in social science: The art of empirical investigation. New York: Random House, 1969.
- Smith, D. H. A psychological model of individual participation in formal voluntary organizations: Applications to some Chilean data. American Journal of Sociology, 1966, 72, 249-266.
- Smith, E. R., & Miller, F. D. Limits on perception of cognitive processes: A reply to Nisbett and Wilson. Psychological Review, 1978, 85, 355-362.
- Smith, J. The narrowing social world of the aged. In I. H. Simpson & J. C. McKinney (Eds.), Social aspects of aging. Durham, N. C.: Duke University Press, 1966.
- Spreitzer, E., & Snyder, E. E. Correlates of life satisfaction among the aged. Journal of Gerontology, 1974, 29, 454-458.

- Streib, G. Morale of the retired. Social Problems, 1956, 3, 270-276.
- Streib, G. F. Social stratification and aging. In R. H. Binstock & E. Shanas (Eds.), Handbook of aging and the social sciences. New York: Van Nostrand Reinhold Company, 1976.
- Strupp, H. H., Hadley, S. W., & Gomes-Schwartz, B. Psychotherapy for better or worse: The problem of negative effects. New York: Jason Aronson, Inc., 1977.
- Taietz, P. Two conceptual models of the senior center. Journal of Gerontology, 1976, 31, 219-222.
- Thurstone, L. L. The measurement of values. Chicago: The University of Chicago Press, 1959.
- Tine, S., & Booth, F. E. The responsibility of the day center for the socially isolated older person. In J. Kaplan & G. J. Aldridge (Eds.), Social welfare of the aging. New York: Columbia University Press, 1962.
- Tissue, T. Social class and the senior citizen center. Gerontologist, 1971, 11, 196-200.
- Townsend, P. Isolation, desolation, and loneliness, In E. Shanas et al. (Eds.), Old people in three industrial societies. New York: Atherton Press, 1968.
- Trela, J. E. Social class and association membership: An analysis of age-graded and non-age-graded voluntary participation. Journal of Gerontology, 1976, 31, 198-203.
- Trela, J. E., & Simmons, L. W. Health and other factors affecting membership and attrition in a senior center. Journal of Gerontology, 1971, 26, 46-51.
- Wagner, M. W. Forward to J. H. Woods, Helping older people enjoy life. New York: Harper and Brothers, 1953.
- Wall, T. D. Overall job satisfaction in relation to "social desirability," age, length of employment, and social class. British Journal of Social and Clinical Psychology, 1972, 11, 79-81.
- Ward, R. A. The meaning of voluntary association participation to older people. Journal of Gerontology, 1979, 34, 438-445.

- Warren, R. The community in America. Chicago: Rand McNally, 1972.
- Weiss, R. S. Loneliness: The experience of emotional and social isolation. Cambridge, Mass.: The MIT Press, 1973.
- Wilensky, H. L. Orderly careers and social participation: The impact of work history on social integration in the middle mass. American Sociological Review, 1961, 26, 521-539.
- Williams, J. A., Jr., Babchuk, N., & Johnson, D. R. Voluntary associations and minority status: A comparative analysis of Anglo, Black, and Mexican Americans. American Sociological Review, 1973, 38, 637-646.
- Wilson, W. Correlates of avowed happiness. Psychological Bulletin, 1967, 67, 294-306.
- Woods, J. H. Helping older people enjoy life. New York: Harper and Brothers, 1953.
- Wood, V., Wylie, M., & Sheafor, B. An analysis of a short self-report measure of life satisfaction: Correlation with rater judgments. Journal of Gerontology, 1969, 24, 465-469.
- Wylie, M. L. Life satisfaction as a program impact criterion. Journal of Gerontology, 1970, 25, 36-40.
- Zalegnik, A., & Moment, D. The dynamics of interpersonal behavior. New York: John Wiley and Sons, Inc., 1964.
- Zarit, S. Psychological aspects of day care. Paper presented at the annual meeting of the Gerontological Society, Louisville, 1975.

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Education

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1977-1980	Duke University Graduate School, Durham, North Carolina.

Positions Held

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Awards

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